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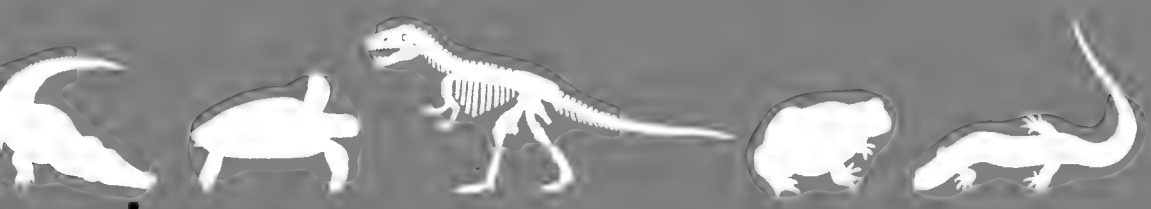
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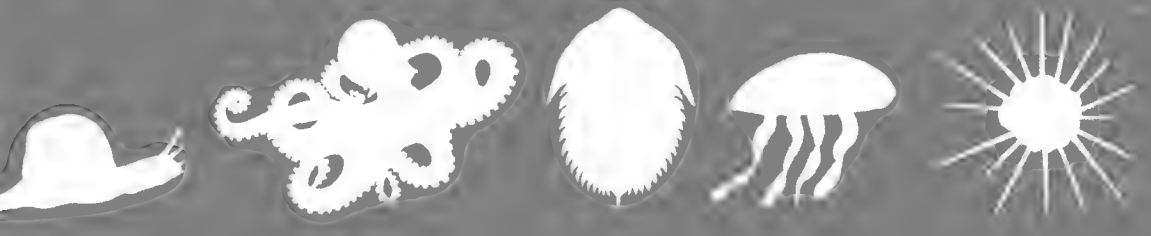
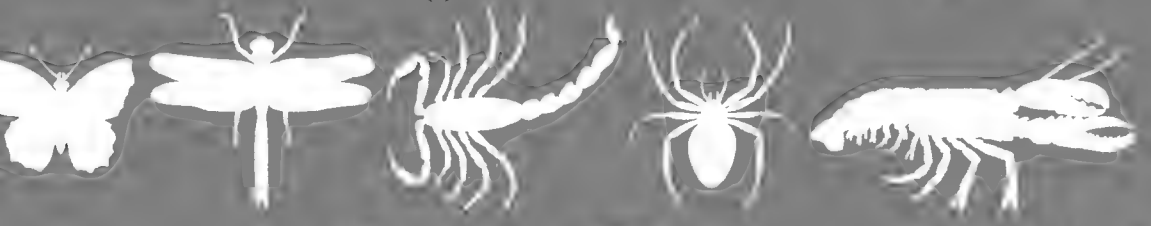
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The
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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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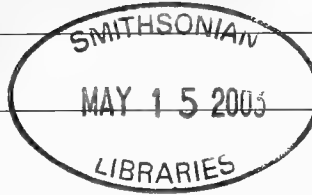
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 60, part 1 (pp. 1–92)

31 March 2003

**Notices**

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his or her contribution to the Commission's Executive Secretary as quickly as possible.

(b) *Invitation to contribute general articles.* The *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed emendments to the Code are also published for discussion.

In addition, papers or notes of a more general nature are actively welcomed. These should raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 59, part 4 (19 December 2002). Under Article 82 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

Case 3246. *Scorpio chilensis* Molina, 1782 (currently *Bothriurus chilensis*; Arachnida, Scorpioles): proposed suppression of the specific name. L.E. Acosta & C.J. Mattoni.

Case 3254. *Aphodius niger* Illiger, 1798 (Insecta, Coleoptera): proposed conservation of the specific name. F.-T. Krell, D.J. Mann, R.B. Angus & J.F. Maté.

Case 3258. *Acmaeodera* Eschscholtz, 1829 and *Acmaeoderella* Cobos, 1955 (Insecta, Coleoptera): proposed conservation of usage by designation of *Buprestis cylindrica* Fabricius, 1775 as the type species of *Acmaeodera*. C.L. Bellamy & M.G. Volkovitsh.

Case 3259. *Eristalis* Latreille, 1804 (Insecta, Diptera): proposed confirmation that the gender is feminine; *Musca nemorum* Linnaeus, 1758, *M. arbustorum* Linnaeus, 1758 and *M. horticola* De Geer, 1776 (currently *Eristalis nemorum*, *E. arbustorum* and *E. horticola*): proposed conservation of usage of the specific names by designation of neotypes. P. Chandler, A. Wakeham-Dawson & A. McCullough.

Case 3260. *Titanodamon johnstonii* Pocock, 1894 (currently *Damon johnstonii*; Arachnida, Amblypygi): proposed conservation of the specific name. P. Weygoldt.

Case 3262. *Nautilus spengleri* Gmelin, 1791 (Foraminiferida): proposed conservation of the usage of the specific name by designation of a neotype. W. Renema & J. Hohenegger.

Case 3263. *Octopus hummelincki* Adam, 1936 (Mollusca, Cephalopoda): proposed conservation of the specific name. I.G. Gleadall.

(d) *Rulings of the Commission*. Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The International Commission on Zoological Nomenclature and its publications

The International Commission on Zoological Nomenclature was established in 1895 by the third International Congress of Zoology, and at present consists of 25 zoologists from 20 countries whose interests cover most of the principal divisions (including palaeontology) of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS), and members are elected by secret ballot of zoologists attending General Assemblies of IUBS or Congresses of its associated bodies or other appropriate Congresses. Casual vacancies may be filled between Congresses. Nominations for membership may be sent to the Commission Secretariat at any time.

The *International Code of Zoological Nomenclature* has one fundamental aim, which is to provide 'the maximum universality and continuity in the scientific names of animals compatible with the freedom of scientists to classify animals according to taxonomic judgements'. The Fourth Edition of the *Code* was published in 1999 by the International Trust for Zoological Nomenclature, acting on behalf of the Commission; its provisions came into effect on 1 January 2000 and supersede those of the previous (1985) edition. Official texts are available in English, Chinese (traditional), French, German, Japanese, Russian, Spanish and Ukrainian, and other texts are in preparation. Details of how to obtain the *Code* are given on page 6.

Observance of the rules in the *Code* enables a zoologist to arrive at the valid name for any animal taxon between and including the ranks of subspecies and superfamily. Its provisions can be waived or modified in their application to a particular case when strict adherence would cause confusion; however, this must never be done by an individual but only by the Commission, acting on behalf of all zoologists. The Commission takes such action in response to proposals submitted to it; applications should follow the instructions in the *Bulletin of Zoological Nomenclature*, and assistance will be given by the Secretariat.

The *Bulletin* is published four times each year. The subscription for volume 60 for 2003 is £123 or \$220; individual subscribers requiring the *Bulletin* for their personal use are offered a reduced price of £61 or \$110. The *Bulletin* contains applications for Commission action, as described above; their publication is an invitation for any person to contribute comments or counter-suggestions, which may be published. Abstracts of applications are also placed on the Commission's website (www.iczn.org). The Commission makes a ruling (called an Opinion) on a case only after a suitable period for comments; all Opinions are published in the *Bulletin* and their titles and abstracts are given on the Commission website. The *Bulletin* also contains articles and

notes relevant to zoological nomenclature; such contributions are invited and should be sent to the Executive Secretary.

The Commission's rulings are summarised in the *Official Lists and Indexes of Names and Works in Zoology*. A single volume covering the period 1895–1985 was published in 1987, and a Supplement updating the period to 2000 was published in March 2001.

In addition to dealing with applications and other formal matters, the Commission's Secretariat is willing to help with advice on any question which may have nomenclatural (as distinct from purely taxonomic) implications. However, as from July 2002 requests for help and advice on nomenclatural issues can be made direct to Commissioners via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see BZN 59: 234).

The International Trust for Zoological Nomenclature is a charity and a not-for-profit company registered in the U.K. The Secretariat of the Commission is based in London, and the Trust is established there to handle the financial and management affairs of the Commission. Income from the sale of publications covers less than half the costs of the service given to zoology by the Commission. Financial support is given by academies, research councils, institutions and societies from a number of countries, and also by individuals; despite this assistance the level of income remains a severe restraint. Donations to the Trust are gratefully received and attention is drawn to the possible tax advantage of legacies.

For a more detailed discussion of the Commission and its activities and publications see BZN 48: 295–299 (December 1991). A Centenary History of the Commission – *Towards Stability in the Names of Animals* – describes the development of zoological nomenclature and the role of the Commission; it was published in 1995.

The books listed above may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) or AAZN, MRC-159, National Museum of Natural History, Washington, D.C. 20560–0159, U.S.A. (e-mail: smith.davidg@nsmnh.si.edu).

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Four issues of the *Bulletin* are published each year at the end of March, June and September and the third week of December. They are sent to subscribers by Accelerated Surface Post which should reach all subscribers in less than three weeks of publication.

The International Code of Zoological Nomenclature

The extensively revised 4th Edition of the *International Code of Zoological Nomenclature* (ISBN 0 85301 006 4) was published (in a bilingual volume in English and French) in August 1999. It came into effect on 1 January 2000 and entirely supersedes the 3rd (1985) edition.

The price of the English and French volume of the 4th Edition is £40 or \$65; the following discounts are offered:

Individual members of a scientific society are offered a discount of 25% (price £30 or \$48); the name and address of the society should be given.

Individual members of the American or European Associations for Zoological Nomenclature are offered a discount of 40% (price £24 or \$39).

Postgraduate or undergraduate students are offered a discount of 25% (price £30 or \$48); the name and address of the student's supervisor should be given.

Institutions or agents buying 5 or more copies are offered a 25% discount (price £30 or \$48 for each copy).

Prices include surface postage; for Airmail please add £2 or \$3 per copy.

Copies may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk), or AAZN, Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: smith.davidg@nsmnh.si.edu).

Payment should accompany orders. Cheques should be made out to 'ITZN' (in sterling or dollars) or to 'AAZN' (in dollars only). Payment to ITZN (but not to AAZN) can also be made by Visa or MasterCard giving the cardholder's number, name and address and the expiry date.

Individual purchasers of the Code are offered a 50% discount on the following publication for personal use:

Towards Stability in the Names of Animals – a History of the International Commission on Zoological Nomenclature 1895–1995 (1995) – reduced from £30 to £15 and from \$50 to \$25;

Official texts of the Code in several languages have been authorized by the Commission, and all (including English and French) are equal in authority. Chinese (traditional), German, Japanese, Russian and Spanish texts have now been published and others are planned. Details of price and how to buy the published texts can be obtained from the following e-mail addresses:

Chinese – wenhua@oceantaiwan.com

German – books@insecta.de

Japanese – tomokuni@kahaku.go.jp

Russian – kim@ik3599.spb.edu

Spanish – mcnaz39@mncn.csic.es

***Zoological Record* and registration of new names in zoology**

Joan Thorne (Editor, *Zoological Record*)

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Abstract. BIOSIS is offering, through *Zoological Record* (ZR), to provide a database register of new names in zoology. Inclusion of a name in this register would not indicate or imply its validity or other nomenclatural status. The register would provide the raw material needed by those seeking to establish which new zoological species, genera or families have recently been described and named. The register would also include those names that appear to be unavailable under the Code (where possible they would be indicated as such), but would not arbitrate in matters relating to the availability or validity of the names. Expert taxonomists, calling on the assistance of the Commission where necessary, would determine which names were available and valid for use in a particular group of animals. ZR's coverage of new names is well over 90% complete and takes place within two weeks of receipt of new publications by ZR or within three to six weeks of receipt of new publications by source libraries. Double-checking ensures that far less than one percent of 20,000 new animal names registered each year is likely to be recorded incorrectly. There is no existing registration source that is more up-to-date or complete. The register would be available on line free of charge to anyone who wished to check on the existence of a name and would provide a sound basis for a full nomenclatural repository. However, the register could only be as comprehensive as the community chooses to make it. A comprehensive register could be achieved if zoologists ensured that ZR was aware of all new works containing new names. The 10% of new names not currently registered by ZR because of the obscurity of the publications in which they appear (or other reasons) could be eliminated if the Code required all new names to be registered. Therefore, it is proposed that Recommendation 8A of the Code (which recommends that authors should send a copy of a work containing a new name or names to ZR) be revised to become a mandatory Article.

Keywords. Nomenclature; taxonomy; register of new names; BIOSIS; *Zoological Record*.

Introduction

This article was written following the extensive discussions leading up to the publication in 1999 of the Fourth Edition of the *International Code of Zoological Nomenclature* and more recently with the Commission's Executive Secretary on a possible role for *Zoological Record* (ZR) in 'registering' new names in zoology. During the preparation of the paper, the concept of a centralized archive/database for taxonomists was also raised in the journal *Nature* (*Nature*, 2002). This stimulated extensive exchanges on the TAXACOM e-mail discussion list. I hope that the views on names registration expressed in the current paper will be a valuable addition to the discussion.

In the current proposal, BIOSIS is offering the means to collect all new animal names and, acting as a neutral host, make them available free of charge to all who need to use them. In BIOSIS's view, this would be a means of registering new names and would provide a firm foundation for *Nature's* more extensive concept of a centralized repository of nomenclature. If I have understood the latter correctly, this would involve extending the basic names database to include additional data, such as description, type locality, holotype location, links to the bibliographic citation, abstract or the full text of the publication. Developing such systems is one of BIOSIS's core activities and, although BIOSIS does not have the funds to offer to implement this more extensive concept on its own, it would be willing to participate in any suitable cooperative arrangements that might be developed in the zoological community.

It is important to note that the word 'registration', as used in the current paper, is simply a label to describe a proposal for providing a comprehensive database of new names in zoology. Inclusion of a name in this register would not indicate its validity or other nomenclatural status. The register would provide the raw material needed by those seeking to find out what species, genera or families had been described and named. The expert taxonomists, calling on the assistance of the Commission where necessary, would determine which names were valid for use in a particular group of animals.

The current situation

The value of a central zoological names resource is generally accepted but, unfortunately, the means of providing it is not. Recognizing this situation, *Nature* (Nature, 2002) has recently taken 'a small step towards a database for taxonomists'. A new policy, started in August 2002, requires authors of papers which are accepted for publication in *Nature* and which contain 'the formal nomenclature and description of species' to send a preprint or an electronic copy to the Linnean Society of London. With this action, *Nature* has made the first move towards a central repository for taxonomic data, although the Linnean Society does not currently have an established mechanism to act as a repository of this nature. We applaud this initiative. However, as the ZR is already in existence as just such a repository, BIOSIS would like to explore possible options which could develop the idea further without duplicating already existing efforts.

New names in *Zoological Record* (ZR)

In 1995, the discussion draft of the current (fourth) edition of the Code included an Article that proposed a process of 'international notification' of new names. This was to be achieved by recording them in ZR. As part of this proposal, BIOSIS developed the Index to Organism Names (ION; http://www.biosis.org.uk/free_resources/ion.html), a free name search tool that enables any user to check whether a name has been used. All zoological names indexed in ZR since 1978 were added to this database, together with names from other associated organism groups to enhance its value to the wider scientific community. ION is still freely available and is currently being enhanced with improved search mechanisms and additional content.

However, the 'notification' proposal was at the time unacceptable to the zoological community for a number of reasons, and therefore was finally included in the current

Code as a recommendation (Recommendation 8A) rather than as a mandatory Article. The main concerns of the community related to coverage, availability and accessibility, to which ZR responded (Howcroft & Thorne, 1999) as follows:

- (1) *Coverage*. ZR's names coverage is estimated to be well over 90% complete (Bouchet, 1999). The remaining 10% or so of names are mainly those published in sources to which ZR does not have access. We estimate that names we seek from source libraries are usually indexed in ZR within six weeks of receipt at the source library and a great majority are indexed within three weeks. Material sent directly to ZR from publishers is normally indexed within two weeks of receipt. As each new name indexed is double checked for spelling, only a small fraction of one percent of new names is likely to be recorded incorrectly. We know of no more current or complete names resource.
- (2) *Availability*. Names are recorded at face value and reflect the literature. Names that have been published improperly under the Code and are therefore formally unavailable are still recorded. This may include names that are not accompanied by an adequate description, names that are published electronically or associated with invalid typification. Names are checked against selected criteria of availability and if they appear to be unavailable under the Code, this is stated in the index entry. Other than this ZR is an unbiased index to the literature and makes no judgements on the status or validity of names. This is the province of taxonomists not indexers. ZR has adopted this neutral position throughout its existence. However, it would not be difficult to mark in the register those newly published names that do not fulfil selected criteria.
- (3) *Access*. There was an incorrect assumption that access to new names could only be achieved through ZR and that this access would have to be paid for. This was never the case and the ION service, then as now, is free to anyone who wishes to check on the existence of a name. Other zoologists questioned the viability of ZR and expressed concern about long-term access to the register. BIOSIS has long recognized the importance of archival issues, and can use its experience to ensure enduring access to a names register. The ZR was founded in 1864. It has survived through two world wars and the technological revolutions of the late 20th century, and the community can be reassured that it is securely positioned for the future.

ZR and registration

Each year ZR selects some 70,000 items from the life science literature, and extracts some 20,000 new animal names. These names, along with existing names indexed from the literature, are made available to users through ION in the free resources part of the BIOSIS web site. We suggest that this existing effort could readily be exploited as a basis for registration purposes.

New animal names published in serials monitored for ZR (this list is available on the BIOSIS web site: www.biosis.org) would be indexed as now. For those new names published in serials not monitored for ZR (i.e. serials not available to us), authors would need to provide a reprint of the relevant articles for indexing as is already recommended in the existing Code. A similar mechanism could be established for names published in non-serial publications.

After indexing, all new names would be transferred to a suitably titled register/database of new animal names mounted by BIOSIS on the web. The new names, marked as such, would simultaneously be added to ION. This would enable such names to be searched alongside existing names. The database would be available free of charge to anyone (including non-subscribers to ZR) who wished to check on the existence of a name. Such a database would provide a sound basis for a full nomenclatural repository. However, it is important to note that in the current proposal and in any other proposal that might be put forward, a new names register/database will only be as comprehensive as the community chooses to make it. It should be noted that registration of a name can only be accomplished once the original publication in which the name is published as new has been indexed in ZR.

BIOSIS and the community

BIOSIS, established in 1926, is a not-for-profit organization based in Philadelphia, U.S.A., which provides a variety of services for those seeking access to life science information. BIOSIS UK, established in 1980, is a subsidiary of BIOSIS, based in York, England. It compiles *Zoological Record* and provides an international presence for the organization. BIOSIS is self-sustaining – there are no shareholders; any surplus is reinvested in the company, and in the development of new services for the life science community.

True to its mission, BIOSIS has long standing associations with several organizations, and is an active participant of the Committee on Data for Science and Technology (CODATA), the Global Biodiversity Information Facility (GBIF), Species 2000, and the Taxonomic Databases Working Group (TDWG). It also has close ties with the Commission, and currently hosts the web sites of the Commission and of Species 2000.

In addition to its participation in the activities of these organizations, BIOSIS has recently created a new web-portal site entitled 'BiologyBrowser' (www.biologybrowser.org) offering a range of free services to the research and education community. This incorporates an indexed web directory of links to relevant Internet sites, an animal classification guide for students and teachers, a biological conference calendar, and, in collaboration with other organizations, ION.

Working with the zoological community is also a means of ensuring that significant duplication of effort is avoided. Sharing resources, or using existing resources for new applications, benefits the entire community, and the concept of registration is no exception. Registration would support, not compete with, GBIF, Species 2000, and the many other names and biodiversity initiatives. Moreover, using the ZR, registration could be accomplished with little extra effort by anyone else in the publication chain.

BIOSIS and ZR

For almost a century the Zoological Society of London (ZSL) subsidized the publication of ZR. In 1980, aware that it could not continue to provide this subsidy and wishing to ensure the continuity of ZR, the ZSL entered into a joint publishing agreement with BIOSIS. In the agreement, all production, management and financial liability for ZR was transferred to BIOSIS, and BIOSIS UK was created. Since 1980, BIOSIS has eliminated a significant publication backlog in ZR, introduced new

production systems, and issued ZR in electronic formats. Following these achievements, the BIOSIS Board (which includes several eminent members of the life science community) has given overwhelming support for the ongoing development of ZR and its community activities.

Conclusion

Given the critical role of names in all life science research, it is essential that the zoological community agrees on a mechanism to bring them together in a central resource. BIOSIS is well positioned, and willing, to provide this. With the help of the community, and by using existing ZR procedures, a fully comprehensive new animal names database (and perhaps, in the future, other organism names) could readily be established. Taking this further, to provide a repository of the full description, links to abstracts etc., would be a logical step that BIOSIS would be interested in discussing with others. To make the registration of names that BIOSIS proposes a reality, the current recommendation in the Code that authors should send a copy of their work to ZR would have to be emended by the Commission to become a mandatory requirement in the form of an Article of the Code.

Acknowledgements

I thank The Earl of Cranbrook (Chairman of the International Trust for Zoological Nomenclature), Dr John Marsden (Executive Secretary, Linnean Society of London), Dr Andrew Smith (The Natural History Museum, London), Dr Andrew Wakeham-Dawson (Executive Secretary of the Commission) and the BIOSIS Board for helpful discussion about the registration of names.

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Comments on this article are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3229***Erbocyathus* Zhuravleva, 1955 (Archaeocyatha): proposed conservation**

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Abstract. The purpose of this application is to conserve, under Article 23.9.3 of the Code, the generic name *Erbocyathus* Zhuravleva, 1955, which is in widespread use for a group of Cambrian fossil sponge-like archaeocyaths (family ERBOCYATHIDAE). This name was proposed to replace the pre-occupied name *Polycyathus* Vologdin, 1928, but is threatened by the single usage in 1955 of an older replacement name *Pluralicyathus* Okulitch, 1950.

Keywords. Nomenclature; taxonomy; Archaeocyatha; ERBOCYATHIDAE; *Erbocyathus*; *Polycyathus heterovallum*; Early Cambrian; fossil.

1. Vologdin (1928, p. 32) erected a new Archaeocyatha genus and named it *Polycyathus* (type species *P. heterovallum* Vologdin, 1928 (p. 36) by subsequent designation by Simon (1939, p. 34)) for an unusual, modular two-walled septate archaeocyath that has an attached microporous sheath on its outer wall, several rows of simple pores per intersept on its inner wall, and aporose to sparsely porous septa (Debrenne et al., 1990, p. 141). Vologdin (1928, p. 35) also erected the family POLYCYATHIDAE based on his new genus. The class Archaeocyatha Bornemann, 1884 includes fossil marine organisms almost exclusively from the Early Cambrian epoch. The group is now generally assigned to the sponges (Porifera).

2. However, Simon (1939, p. 34) noted that Vologdin's generic name *Polycyathus* had already been used by Duncan in 1876 for a genus of cnidarian. In response, replacement names for *Polycyathus* Vologdin, 1928 were subsequently and independently proposed by both V.J. Okulitch and I.T. Zhuravleva.

3. Okulitch (July 1950, p. 503) proposed the replacement name *Pluralicyathus* in order to stabilise nomenclature for the then forthcoming edition of the *Treatise on Invertebrate Paleontology* (Okulitch, 1955, pp. E1-E20), in which he used the name on p. E10.

4. Zhuravleva (1949, p. 10; February 1950a, p. 11) mentioned a replacement name, *Erbocyathus*, for the same genus in two avtoreferats. In the former U.S.S.R., and subsequently, avtoreferats were and are short thesis summaries that are issued in small numbers in connection with the examination of a submitted thesis. Zhuravleva's first (1949) defence of her kandidat thesis in biological sciences was not successful, whereas her second (1950) was. Her 1949 avtoreferat was reprinted with modifications in February 1950. She used the name *Erbocyathus* only once in each of the avtoreferats when writing about the Obruchev horizon: 'Apart from the characteristic species *Erbocyathus (Polycyathus) heterovallum* (Vologdin), several species of *Ethmophyllum*, *Retecyathus operosus* and others are found there [1949, p. 10; 1950a, p. 11; current authors' translation]'.

5. Only 150 copies for each of Zhuravleva's avtoreferats were printed and distribution was very limited. As a result, we do not accept that the name *Erbocyathus* is available from either of these avtoreferats (see Article 8.1 of the Code). In addition, neither of the two avtoreferats contains a clear statement that *Erbocyathus* is intended to be a replacement name for *Polycyathus*.

6. The first undisputed publication of the generic name *Erbocyathus* is by Zhuravleva (1950b, October), where she writes regarding development of modularity in the cup (p. 857): 'In representatives of the "genus" *Erbocyathus (=Polycyathus)* from the former "family" POLYCYATHIDAE, cups were observed only up to the stage of a continuous inner wall. Revision of *Erbocyathus* specimens in the Palaeontological Institute A.N. S.S.S.R., . . . together with familiarity with all known literature on colonial archaeocyaths, leads me to the conviction that in those cases in which examples with a colonial skeleton are found, species should never be distinguished as independent genera and families only on this feature alone, for all cases of colonial cups just as for solitary individuals. Thus we can abolish the following colonial "genera" of archaeocyaths: *Erbocyathus (=Polycyathus)*, *Sajanocyathus* Vologdin and *Densocyathus* Vologdin [current authors' translation]'. However, this publication of the replacement name *Erbocyathus* by Zhuravleva (1950b) does not satisfy the requirements of Article 13 (specifically Article 13.1.3), as the provisions of Article 11 are not also satisfied (Article 13.1). This is because the whole thrust of Zhuravleva's commentary (quoted above) is not to validate the genus as required by Article 11.5, but to abolish it.

7. The name *Erbocyathus* was next used by Zhuravleva (1955), within an existing family, though again without diagnosis or any elaboration. She mentions the genus once (p. 44): 'Thus it is concluded that the genera numbered in the family Ethmophyllidae are few – four in all: *Ethmophyllum* Meek, *Ethmocyathus* R. & W. Bedford, *Tegerocyathus* Krasnopeeva and *Erbocyathus (=Polycyathus)* Zhuravleva'. This usage appears to satisfy Article 11.5 and therefore Article 13, provided that the construction '*Erbocyathus (=Polycyathus)* Zhuravleva' constitutes an express proposal of a new replacement name for the purposes of Article 13.1.3. We have accepted that this is the case and that the name *Erbocyathus* Zhuravleva became available in 1955.

8. Vologdin (1956, p. 879) later proposed the family ERBOCYATHIDAE Vologdin & Zhuravleva. Although no diagnosis was provided, this name is available under Article 13.2.1, as we have accepted (para. 7 above) that the replacement name *Erbocyathus* was successfully made available by Zhuravleva in 1955 (p. 44) (Article 13.2).

9. Zhuravleva (1960, p. 189), in her influential book on Siberian Platform archaeocyaths, used '*Erbocyathus* Zhuravleva, 1950', invalidly citing her 1950a autoreferat as having made this name available. She provided diagnosis, description and illustration of the genus and also accepted the family name ERBOCYATHIDAE Vologdin & Zhuravleva, 1956 and (p. 187) elevated this to a superfamily with the name ERBOCYATHACEA. Both names are in use today. *Polycyathus heterovallum* Vologdin, 1928 is the type species of *Erbocyathus* Zhuravleva, 1955 (see para. 1 above and Article 67.8).

10. From 1950 to the present, *Erbocyathus* Zhuravleva (generally attributed to the 1950a publication) has been widely viewed as the valid replacement name for *Polycyathus* Vologdin, 1928. To our knowledge, no author has challenged the use of the name *Erbocyathus*, other than Okulitch (1955) who used the senior replacement name *Pluralicyathus* Okulitch, 1950. To date the genus *Erbocyathus* has been treated taxonomically in numerous publications including seminal works by Hill (1965, 1972), Rozanov (1973) and Debrenne et al. (1990) and includes five species from the Siberia-Mongolia-Central Asia region (Debrenne et al., 1990). With the exception of Okulitch (1955), the name *Pluralicyathus* has only been cited as a synonym of *Erbocyathus*, and no species other than the type species has ever been assigned to the genus *Pluralicyathus*.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Pluralicyathus* Okulitch, 1950 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Erbocyathus* Zhuravleva, 1955 (gender: masculine), type species *Polycyathus heterovallum* Vologdin, 1928 by subsequent designation by Simon (1939) of the replaced nominal genus *Polycyathus* Vologdin, 1928;
- (3) to place on the Official List of Specific Names in Zoology the name *heterovallum* Vologdin, 1928, as published in the binomen *Polycyathus heterovallum* (specific name of the type species of *Erbocyathus* Zhuravleva, 1955);
- (4) to place on the Official List of Family-Group Names in Zoology the name ERBOCYATHIDAE Vologdin & Zhuravleva, 1956, type genus *Erbocyathus* Zhuravleva, 1955;
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the names:
 - (a) *Pluralicyathus* Okulitch, 1950, as suppressed in (1) above;
 - (b) *Polycyathus* Vologdin, 1928 (a junior homonym of *Polycyathus* Duncan, 1876).

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Case 3216***Spongia ventilabra* Linnaeus, 1767 (currently *Phakellia ventilabra*; Porifera): proposed conservation of the specific name and designation of a neotype**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the specific name of the type species of the axinellid sponge genus *Phakellia* Bowerbank, 1862. The name in prevailing usage is *Spongia ventilabra* Linnaeus, 1767. This name is threatened by the use in 1912 of a senior objective synonym, *Spongia strigosa* Pallas, 1766. A neotype is designated for *Spongia ventilabra* Linnaeus, 1767.

Keywords. Nomenclature; taxonomy; Porifera; AXINELLIDAE; *Phakellia*; *Phakellia ventilabra*; sponges.

1. In 1766, Professor Peter Pallas introduced the name *Spongia strigosa* for a new species of fan-shaped sponge (family AXINELLIDAE) from 'Mare Americanum' (Pallas, 1766, p. 397). Pallas's description referred to a sponge described as '*planta marina foliacea & spongiosa, singulari modo ramosa*' (p. 184), and illustrated (pl. 95, fig. 8) as such in the *Thesaurus* of Albertus Seba (1758). This work corresponds to the third of Seba's four volumes, which was published about twenty years posthumously under the editorship of Pallas amongst others (see Engel, 1961).

2. Linnaeus (1767, p. 1296) described *Spongia ventilabra* from 'M. Norvegico' collected by Bishop Gunnerus at Drontheim (now Trondheim). This description also mentioned the illustration given by Seba and the description of *Spongia strigosa* given by Pallas. Pallas's and Linnaeus's names were based on the same source, that is Seba's figure, which was given to Seba by Gunnerus (see Esper, 1794, p. 211). The names *Spongia strigosa* and *Spongia ventilabra* are therefore objective synonyms.

3. In his encyclopaedia of nature, Esper (1794, pp. 209–211) included *Spongia ventilabra* Linnaeus and indicated that it could be the same species described by Pallas as *Spongia strigosa*, but he made no formal synonymy. As if to indicate his own uncertainty, Esper included both specific names in the legend to his own illustration (Spong, tab XII).

4. Fleming (1828, p. 523) used Linnaeus's specific name in the new combination *Halichondria ventilabra* without mentioning *Spongia strigosa*. Later, Johnston (1842) referred to the species as *Halichondria ventilabrum* (sic) without explanation and since then the specific name has been spelt incorrectly as *H. ventilabrum*.

5. Under the modern Code, Johnston's emendation of the spelling *H. ventilabra* to *H. ventilabrum* was an incorrect subsequent spelling because the specific name *H. ventilabra* was introduced as a noun in apposition, and as such its suffix is not

changed to match the gender of the generic name with which it is in combination (Article 34.2.1); in any case both *Halichondria* and *Spongia* are feminine. However, in defence of Johnston, we note that 'ventilabrum' is the correct Latin noun meaning an implement for winnowing grain (Lewis & Short, 1980) and it was also the spelling used by Gunnerus (Acta. Nidrof. vol. 4, fig. 4, fide Linnaeus, 1767).

6. Bowerbank (1862, p. 1109) designated *Halichondria ventilabrum* (sic) as the type species of his new genus *Phakellia*. *Phakellia* is now a large genus of axinellid sponges with 34 described and many unnamed species worldwide (B. Alvarez, unpublished data). Vosmaer (1912), following Esper (1794), identified the synonymy between the names *Spongia strigosa* and *Spongia ventilabra* and stated that the valid name for the type species of *Phakellia* was *P. strigosa* (Pallas). However, no author except Bergquist (1970), who merely listed the name *P. strigosa*, has followed Vosmaer in the past ninety years.

7. Vosmaer (1912) claimed that he had found a dried sponge in the collection of the Museum of Leiden which, in his opinion, strongly resembled the figure of Seba (see para. 1 above) and he suggested that this specimen was the type specimen of *Spongia ventilabra* Linnaeus. However, we believe Vosmaer's conclusion is unjustified for several reasons. First, it is likely that Seba's figure was based solely on the drawing by Gunnerus. Even if Seba's illustration were based on an actual specimen, it is unlikely still to be extant because most of the specimens illustrated in his *Thesaurus* were ruined by mould and insects, or were sold to meet the expenses of printing the final two volumes of the *Thesaurus* (Engel, 1961). Anyway, Vosmaer's specimen (M.L.B. 3) cannot now be located in the Leiden sponge collection (pers. comm. to B. Alvarez by J.C. den Hartog, 22 May 1996). There are no records attributable to *Spongia ventilabra* in the Linnaean collections housed at the Linnean Society of London or at the Museum of Uppsala in Sweden (pers. comm. to B. Alvarez by Kathie Way, Curator of Zoological Collections at the Natural History Museum, London).

8. Given that there is good evidence that the original specimen of this sponge is no longer extant we believe that a neotype designation is strongly needed. Neither the original description of *Spongia ventilabra* by Linnaeus (1767), nor the illustration of Seba cited within, provides an adequate basis for differentiation of this species from others in the large genus as it is presently understood (Alvarez & Hooper, 2002). For example, skeletal characters such as type and length of spicules, which are diagnostic at the species level within the genus *Phakellia*, were not mentioned in the original descriptions.

9. Several of the dry specimens upon which Bowerbank based the genus *Phakellia* are deposited at the Natural History Museum (London) and were examined by one of us (B. Alvarez) and they all agree with the present concept of *P. ventilabra* (Linnaeus). One of these specimens (registered as BMNH 10.1.1.2687) is here designated as the neotype for *Spongia ventilabra*. The specimen comes from the same locality (Norway) as the original Gunnerus specimen of *Spongia ventilabra* (see para. 2 above) and externally matches the description of Linnaeus (1767). The specimen is flabellate, approximately 23 cm high by 20 cm wide, with a short peduncle approximately 1 cm in diameter. Its surface is hispid and marked by a reticulum of spicule tracts, some of the ascending ones are thickened (5–7 mm) like veins. There is no specialised ectosomal skeleton. The choanosomal skeleton is reticulated with

primary tracts of sinuous strongyles (300–600 μm thick) and these are plumo-echinated by styles or connected by secondary unispicular or paucispicular tracts of styles or strongyles (60–200 μm thick). The spicules are sinuous strongyles (length 630–1060 μm , width 13–18 μm) and styles are straight, flexuous, or bent near the head (length 360–710 μm , width 10–15 μm). The external and skeletal features of *Phakellia ventilabrum* are illustrated (under that name) in Alvarez & Hooper (2002, p. 739).

10. The single adoption of the senior synonym *Spongia strigosa* Pallas, 1776 rather than *S. ventilabra* Linnaeus, 1767 by Vosmaer in 1912 (see para. 6. above) prevents the ‘automatic’ conservation of the later name under Article 23.9.1, and we submit this application in accordance with Article 23.9.3.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the specific name *strigosa* Pallas, 1766, as published in the binomen *Spongia strigosa*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Phakellia* Bowerbank, 1862 (gender: feminine), type species by original designation *Spongia ventilabra* Linnaeus, 1767;
- (3) to place on the Official List of Specific Names in Zoology the name *ventilabra* Linnaeus, 1767, as published in the binomen *Spongia ventilabra* and as defined by the neotype (specimen BMNH 10.1.1.2687) designated in para. 9 above (specific name of the type species of *Phakellia* Bowerbank, 1862);
- (4) to place on the Official List of Rejected and Invalid Specific Names in Zoology the name *strigosa*, as published in the binomen *Spongia strigosa* Pallas, 1766 and suppressed in (1) above.

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Reproduction from Seba (1758, pl. 95, fig. 8) of '*planta marina foliacea & spongiosa, singulari modo ramosa*'.

Case 3223***Unio ochraceus* Say, 1817 (currently *Ligumia ochracea*; Mollusca, Bivalvia): proposed precedence of the specific name over *Mytilus fluviatilis* Gmelin, 1791**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the widely used specific name of *Unio ochraceus* Say, 1817 (currently *Ligumia ochracea*) for the American freshwater mussel (tidewater mucket) (family UNIONIDAE) by giving it precedence over the little used senior subjective synonym *Mytilus fluviatilis* Gmelin, 1791.

Keywords. Nomenclature; taxonomy; Mollusca; UNIONIDAE; *Ligumia ochracea*; *Mytilus fluviatilis*; tidewater mucket; fresh water mussel; clam; America.

1. Lister (1685, pl. 157, fig. 12) described a freshwater clam (family UNIONIDAE) that is today commonly called the tidewater mucket or American freshwater mussel (see Turgeon et al., 1998, p. 35). Lister depicted the external left valve and named the clam 'Pectunculis fluviatilibus'. He gave the locality as 'Vir' [Virginia] and described the clam as 'pectunculus tenuis, subruher ex internâ parte, rostro recuruo'. The last known repository of Lister's material was Oxford University Museum, although it now appears to have been lost (Wilkins, 1953; Dance, 1966, p. 292; J.B. Davies, Oxford University Museum, personal communication).

2. Gmelin (1791, p. 3359) was the first to give a name to the tidewater mucket after 1 January 1758. He named it *Mytilus fluviatilis*, mistakenly placing the species in the marine genus *Mytilus* Linnaeus, 1758 even though he listed its habitat as 'habitat in Europae aquis delcibus' [European freshwater]. Neither figures nor plates were provided with the description. Gmelin (1791, p. 3359) equated *Mytilus fluviatilis* with 'Pectunculis fluviatilibus' as illustrated by Lister (1685, pl. 157, fig. 12).

3. Despite the seniority of the name *Mytilus fluviatilis*, the majority of works over the past two centuries have used the name *Unio ochraceus* Say, 1817 (pl. 2, fig. 8) for the tidewater mucket (see Morrison, 1974, pp. 38–39). The nominal species has been placed in the genera *Lampsilis* and *Leptodea* and most recently in the genus *Ligumia* (see Smith, 2000). Over fifty-six works published after 1817 cite *Ligumia ochracea* as the valid name (e.g. Gould, 1870, pp. 173–174; Johnson, 1947, pp. 150–156, pl. 20; Johnson & Baker, 1973, pp. 163–164; Turgeon et al., 1998, p. 35). The additional list of references has been submitted to the Commission Secretariat. This meets the requirements of Article 23.9.1.2 for automatic conservation of the name *L. ochracea*. However the senior synonym, *L. fluviatilis*, has been used for the fresh water mucket before 1899 (e.g. Dillwyn, 1823, p. 13); and (with reference to Article 23.9.2) since 1899 (e.g. Morrison, 1974, pp. 38–39). Johnson (1947, p. 150) recognized the seniority

of Gmelin's name *fluviatilis* but rejected it on the assumption that Gmelin (1791, p. 1359) only referred to Lister's (1685, pl. 855, fig. 12) figure as one that 'approximated the European' shell Gmelin was describing. Repeated usage of the name *fluviatilis* by subsequent authors (e.g. Gould, 1841, pp. 112–113, fig. 80; Linsley, 1845, p. 277; Simpson, 1914, pp. 386–387; Ortmann, 1919, p. 160; Frierson, 1927, p. 16 and Haas, 1969, pl. 367) can all be attributed to Isaac Lea's (1838, p. 51, pl. 15, fig. 46) erroneous synonymizing of *Mytilus fluviatilis* with another eastern American freshwater mussel, *Pyganodon cataracta* (Say, 1817). Usage of the senior synonym, *Ligumia fluviatilis*, prevents automatic conservation of the junior synonym, *L. ochracea*, under Article 23.9.2. Therefore, in the interests of nomenclatural stability, this application is brought to the Commission under Articles 23.9.3 and 81.2.3 of the Code. Commission approval will mean that if the two names are considered to be synonyms, *L. ochracea* becomes the valid name for the taxon.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *ochraceus* Say, 1817, as published in the binomen *Unio ochraceus*, precedence over the name *fluviatilis* Gmelin, 1791, as published in the binomen *Mytilus fluviatilis*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *ochraceus* Say, 1817, as published in the binomen *Unio ochraceus*, with the endorsement that it is to be given precedence over the name *fluviatilis* Gmelin, 1791, as published in the binomen *Mytilus fluviatilis*, whenever the two are considered to be synonyms;
 - (b) *fluviatilis* Gmelin, 1791, as published in the binomen *Mytilus fluviatilis*, with the endorsement that it is not to be given priority over the name *ochraceus* Say, 1817, as published in the binomen *Unio ochraceus*, whenever the two are considered to be synonyms.

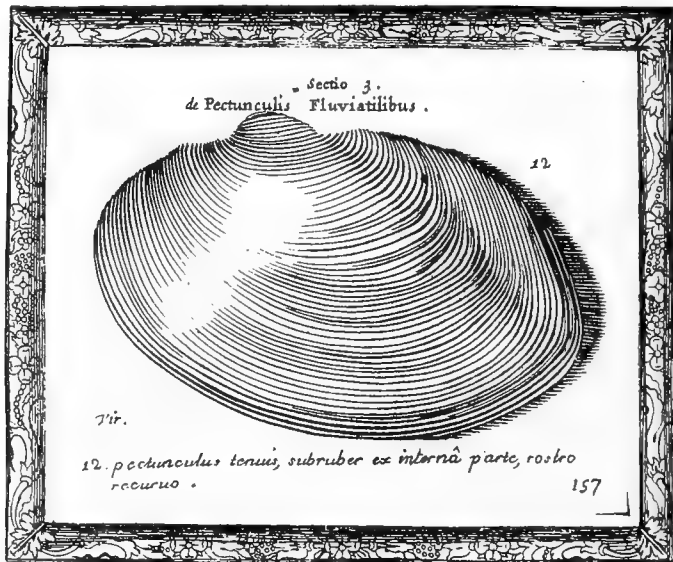
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Pectunculus fluvialibus (Lister, 1685, pl. 157, fig. 12).

Case 3151

**RHOPALURUSINAE Bücherl, 1971 (Arachnida, Scorpiones, BUTHIDAE):
proposed conservation as the correct spelling to remove homonymy
with RHOPALURIDAE Stunkard, 1937 (Orthonectida)**

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Abstract. The purpose of this application, under Articles 29 and 55.3.1 of the Code, is to remove homonymy between the family-group names RHOPALURINAE Bücherl, 1971 (family BUTHIDAE, Scorpiones) and RHOPALURIDAE Stunkard, 1937 (phylum Orthonectida) by changing the spelling of the junior homonym. To date both names have had little use, but the name RHOPALURINAE is likely to be used in future taxonomic revisions of the BUTHIDAE. Before this junior homonym becomes adopted in the literature, it is proposed that the whole of the generic name of the type genus (*Rhopalurus* Thorell, 1876) of RHOPALURINAE should be used to form the emended name RHOPALURUSINAE Bücherl, 1971, leaving the orthonectid senior homonym (RHOPALURIDAE Stunkard, 1937) unchanged.

Keywords. Nomenclature; taxonomy; Orthonectida; Arachnida; Scorpiones; RHOPALURIDAE; RHOPALURUSINAE; *Rhopalura*; *Rhopalurus*; *Rhopalura ophiocoma*; *Rhopalurus laticauda*.

1. The family name RHOPALURIDAE Stunkard, 1937 (p. 6) (phylum Orthonectida) is based on the name of its type genus, *Rhopalura* Giard, 1877 (p. 813) (type species *Rhopalura ophiocoma* Giard, 1877, by monotypy). Giard (1877, pp. 812–813) described the animal in question and just after the description wrote 'Je donne à cet animal étrange le nom de *Rhopalura Ophiocoma*' (p. 813). The name RHOPALURIDAE was introduced by Stunkard (1937, p. 6) as a replacement name for the family called 'ORTHONECTIDAE' by Hartmann (1925). Hartmann's family name was not available because it was not based on any included genus, but merely derived from the phylum name Orthonectida Giard, 1877. The name RHOPALURIDAE was later also proposed by Caullery (1961, p. 703), but Stunkard (1937) has priority as its author. However, family-group names are rarely used in the latest treatments of the phylum Orthonectida (e.g. Kozloff, 1992; Slyusarev & Miller, 1998).

2. The subfamily name RHOPALURINAE Bücherl, 1971 (p. 325) (Scorpiones, family BUTHIDAE) was based on the type genus *Rhopalurus* Thorell, 1876 (p. 9) (type species *R. laticauda* Thorell, 1876 (p. 9) by original designation). *Rhopalurus* is a well-known and diverse genus of large, medically important scorpions from South America and the Caribbean (Kraepelin, 1899; Mello-Leitão, 1945; Bücherl, 1971; Lourenço, 1982, 1986; Sissom, 1990; Fet & Lowe, 2000). The name RHOPALURINAE is an available name under the Code and has no synonyms, but it has not been used in the literature since its introduction, mainly because the subfamilial structure of BUTHIDAE is generally unresolved. Recent treatments of this family have avoided using the subfamily category altogether (Francke, 1985; Sissom, 1990; Fet & Lowe, 2000). However, the name RHOPALURINAE is likely to be used in further taxonomic revisions of the BUTHIDAE.

3. According to Article 29.3, *Rhopalura* Giard, 1877 and *Rhopalurus* Thorell, 1876 have the same stem (*Rhopalur-*). Therefore, according to Article 55.3, RHOPALURIDAE Stunkard, 1937 and RHOPALURINAE Bücherl, 1971 are homonyms in the family-group category and the case must be brought to the Commission for a ruling to remove homonymy.

4. The most straightforward way to remove the homonymy between these two names would be to use the whole of the generic name *Rhopalurus* Thorell, 1876 as the stem for the scorpion family-group name, thereby emending the name RHOPALURINAE Bücherl, 1971 to RHOPALURUSINAE Bücherl, 1971. The latter form is preferred by the Code as a means of avoidance of homonymy in family-group names (see Recommendation 29.6A).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that for the purposes of Article 29 of the Code the stem of the generic name *Rhopalurus* Thorell, 1876 is *Rhopalurus-*;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Rhopalurus* Thorell, 1876, type species by original designation *Rhopalurus laticauda* Thorell, 1876 (Arachnida);
 - (b) *Rhopalura* Giard, 1877, type species by monotypy *Rhopalura ophiocomae* Giard, 1877 (Orthonectida);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *laticauda* Thorell, 1876, as published in the binomen *Rhopalurus laticauda* (specific name of the type species of *Rhopalurus* Thorell, 1876) (Arachnida);
 - (b) *ophiocomae* Giard, 1877, as published in the binomen *Rhopalura ophiocomae* (specific name of the type species of *Rhopalura* Giard, 1877) (Orthonectida);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) RHOPALURIDAE Stunkard, 1937, type genus *Rhopalura* Giard, 1877 (Orthonectida);
 - (b) RHOPALURUSINAE Bücherl, 1971, type genus *Rhopalurus* Thorell, 1876 (spelling emended by the ruling in (1) above) (Arachnida);
- (5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name RHOPALURINAE Bücherl, 1971 (an incorrect original spelling of RHOPALURUSINAE, as ruled in (1) above) (Arachnida).

Acknowledgements

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Case 3236***Zeriassa* Pocock, 1897 (September) (Arachnida, Solifugae): proposed precedence over *Canentis* Pavesi, 1897 (August)**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Zeriassa* Pocock, 1897 for a group of sun spiders (family SOLPUGIDAE) by giving it precedence over the unused older name *Canentis* Pavesi, 1897 whenever the two names are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Arachnida: SOLPUGIDAE; *Zeriassa*; *Canentis*; *Zeriassa bicolor*; *Zeriassa ruspolii*; sun spiders; Africa.

1. In September 1897, Pocock (1897b, p. 252) proposed the generic name *Zeriassa* for a species of sun spider *Zeria bicolor* Pocock, 1897a (p. 392) (family SOLPUGIDAE) that had been collected from an unspecified locality in Somalia. The type species of *Zeriassa* is *Zeria bicolor* Pocock, 1897a by original designation (Pocock, 1897b, p. 255).

2. At virtually the same time, Pavesi (12 August 1897, p. 158) named the genus *Canentis* for the new nominal species *C. ruspolii* Pavesi, 1897 (p. 159) from Somalia. The holotype (a female specimen) is lodged in the Museo Civico di Storia Naturale di Genova and was examined by Simonetta & Della Cave, who (1968) redescribed the species based upon the holotype and several other specimens from Somalia and Ethiopia. *C. ruspolii* Pavesi, 1897 is the type species of *Canentis* by original designation and monotypy.

3. Both Pocock (1897b) and Pavesi (1897) noted the distinctive setal morphology of the eye tubercle that is diagnostic of these species of sun spiders. This feature enabled Kraepelin (1901, p. 81) to recognize the two generic names as synonyms, and he used the name *Zeriassa* as the valid name.

4. Despite Kraepelin's (1901) use of *Zeriassa*, it is clear that *Canentis* has strict priority over *Zeriassa*, as it was published a month prior to *Zeriassa*. However, *Canentis* has not been used as a valid name since Pavesi first established it over a hundred years ago, whereas *Zeriassa* is currently in use for 17 species (including *Z. ruspolii*) found in southern and eastern Africa (e.g. Roewer, 1933; Simonetta & Della Cave, 1968; Wharton, 1981). The use of the name *Canentis* in place of *Zeriassa* would entail considerable confusion and would be contrary to the spirit of the Code (see Article 23.9.3). Although the name *Canentis* has not been used for over a hundred years (see Article 23.9.1.1), the name *Zeriassa* does not meet the criteria of Article 23.9.1.2 for 'automatic' conservation because so few authors have studied this group of animals. I propose that *Zeriassa* is given precedence (see Article 81.2.3) over

Canentis whenever these names are considered to be synonyms. However if, in the light of future research, *Zeriassa* is found not to be congeneric with *Canentis* both names are still available to denote the two taxa.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Zeriassa* Pocock, 1897 precedence over the name *Canentis* Pavesi, 1897, whenever the two names are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Zeriassa* Pocock, 1897 (gender: feminine), type species by original designation *Zeria bicolor* Pocock, 1897, with the endorsement that it is to be given precedence over the name *Canentis* Pavesi, 1897 whenever the two names are considered to be synonyms;
 - (b) *Canentis* Pavesi, 1897 (gender: masculine), type species by original designation and monotypy *C. ruspolii* Pavesi, 1897, with the endorsement that it is not to be given priority over the name *Zeriassa* Pocock, 1897 whenever the two names are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *bicolor* Pocock, 1897, as published in the binomen *Zeria bicolor* (specific name of the type species of *Zeriassa* Pocock, 1897);
 - (b) *ruspolii* Pavesi, 1897, as published in the binomen *Canentis ruspolii* (specific name of the type species of *Canentis* Pavesi, 1897).

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Case 3239***Geostiba* Thomson, 1858 (Insecta, Coleoptera): proposed conservation**

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Abstract. The purpose of this application is to conserve, under Article 23.9.3 of the Code, the prevailing usage of the generic name *Geostiba* Thomson, 1858 for a widespread and well-known genus of Holarctic and Oriental rove beetles (family STAPHYLINIDAE, subfamily ALEOCHARINAE). The name is threatened by very limited use since 1952 of the senior objective synonym, *Evanystes* Gistel, 1856.

Keywords. Nomenclature; taxonomy; STAPHYLINIDAE; ALEOCHARINAE; *Geostiba*; *Geostiba circellaris*; rove beetles; Holarctic; Oriental.

1. Gistel (1856, p. 387) established a genus of rove beetles (now placed in family STAPHYLINIDAE, subfamily ALEOCHARINAE) and named it *Evanystes*. He included eight nominal species in the genus, among them *Evanystes circellaris* (Gravenhorst, 1806). This name was originally published in the binomen *Aleochara circellaris* Gravenhorst, 1806 (p. 155). Gistel did not designate a type species for the genus *Evanystes*. Blackwelder (1952, p. 163) subsequently designated *Aleochara circellaris* Gravenhorst, 1806 as the type species of *Evanystes* and listed *Evanystes* as the senior synonym of *Geostiba* Thomson, 1858.

2. Thomson (1858, p. 33) established a rove beetle genus and named it *Geostiba*. He included only one nominal species, *Homalota circellaris*, in the genus. Although he did not cite the author of this name, Thomson clearly had in mind *Aleochara circellaris* Gravenhorst, 1806, which has been accepted by subsequent authors as the type species by monotypy of *Geostiba* (see Article 67.7).

3. Although the name *Evanystes* is a senior objective synonym of *Geostiba*, it is the name *Geostiba* that has had prevailing usage. To the best of my knowledge, the name *Evanystes* was not used after its original publication until Blackwelder (1952) designated the type species of *Evanystes*. Since Blackwelder (1952) the name *Evanystes* has had some limited use in Eastern Europe, mostly by L. Ádám and his colleagues (e.g. Ádám, 1996).

4. On the other hand, the name *Geostiba* has been used by more than 10 authors in more than 25 works (e.g. Pace, 1977; Seevers, 1978; Lohse & Smetana, 1988; Zerche, 1988; Assing & Wunderle, 1996; Assing, 1999; other records of use have been submitted to the Commission Secretariat). A search of the *Zoological Record* database for the years 1978–2001 produced 39 papers by 16 authors who used the name *Geostiba* as a valid name.

5. The Code seeks to preserve the stability of established names by ensuring that a younger name in prevailing usage is not displaced by an older but little used name

(see Article 23.2). However Article 23.9.1 cannot be automatically applied in the present case as the senior synonym, *Evanystes*, has been used as the valid name for this group of rove beetles by Blackwelder (1952) and a few others.

6. The genus *Geostiba* currently includes about 350 species and subspecies, which are distributed in the Holarctic and Oriental regions. In this situation, strict application of the Principle of Priority and use of the senior synonym *Evanystes* over the junior name *Geostiba* would greatly destabilize staphylinid nomenclature.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Evanystes* Gistel, 1856 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Geostiba* Thomson, 1858 (gender: feminine), type species by monotypy *Aleochara circellaris* Gravenhorst, 1806;
- (3) to place on the Official List of Specific Names in Zoology the name *circellaris* Gravenhorst, 1806, as published in the binomen *Aleochara circellaris* (specific name of the type species of *Geostiba* Thomson, 1858);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Evanystes* Gistel, 1856, as suppressed in (1) above.

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Case 3258

***Acmaeodera* Eschscholtz, 1829 and *Acmaeoderella* Cobos, 1955
(Insecta, Coleoptera): proposed conservation of usage by designation
of *Buprestis cylindrica* Fabricius, 1775 as the type species of
*Acmaeodera***

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Abstract. The purpose of this application, under Article 70.2 of the Code, is to conserve the current usage of the widely used buprestid (jewel beetle) generic names *Acmaeodera* Eschscholtz, 1829 and *Acmaeoderella* Cobos, 1955 (family BUPRESTIDAE) by accepting the designation of *Buprestis cylindrica* Fabricius, 1775 as the type species of *Acmaeodera*. The type species of *Acmaeodera* is at present formally *Buprestis taeniata* Fabricius, 1787 (a junior subjective synonym of *B. flavofasciata* Piller & Mitterpacher, 1783). However, this designation (made in 1841) has been overlooked, and in modern usage *B. cylindrica* has universally been accepted as the type species of *Acmaeodera*. Adoption of *B. taeniata* as type species of *Acmaeodera* would cause great nomenclatural instability as nearly 500 species would be affected by transfer and changes in generic and subgeneric names.

Keywords. Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Acmaeodera*; *Acmaeoderella*; *Carininota*; *Acmaeodera cylindrica*; *Acmaeoderella flavofasciata*; jewel beetles.

1. Eschscholtz (1829, p. 9) introduced the generic name *Acmaeodera* for five nominal species of buprestid beetles (family BUPRESTIDAE): *Buprestis gibbosa* Olivier, 1790, *B. taeniata* Fabricius, 1787 (p. 180), *B. adpersula* (as *adpersa*) Illiger, 1803, *B. ornata* Olivier, 1790, and *B. cylindrica* Fabricius, 1775 (p. 220). None was designated as the type species. *Acmaeodera* now includes 495 species found in all parts of the world except Australasia.

2. Duponchel (1841, p. 88) subsequently designated *B. taeniata* Fabricius, 1787 as the type species of *Acmaeodera*. Desmarest (1860, p. 41) indicated that he considered *B. taeniata* to be the type species of *Acmaeodera*. Starting from the work of Harold (1869, p. 117), *B. taeniata* has been listed as a junior subjective synonym of *B. flavofasciata* Piller & Mitterpacher, 1783 (p. 84) (currently *Acmaeoderella flavofasciata*).

3. Cobos (1955, p. 5) introduced the generic name *Acmaeoderella* and designated *Buprestis discoidea* Fabricius, 1787 (p. 184) as the type species. Later, Cobos (1958) revised the *Acmaeoderini* of Morocco and transferred 21 nominal species of *Acmaeodera* (including *A. flavofasciata*) to *Acmaeoderella*. *Acmaeoderella* currently includes 120 species, all restricted to the Palaearctic region.

4. Volkovitsh (1979, p. 339; see also the 1980 English translation, p. 82) invalidly designated *B. cylindrica* Fabricius, 1775 as the type species of *Acmaeodera*, unaware of the much earlier designation of *B. taeniata* by Duponchel (see para. 2 above). In this work Volkovitsh published a classification for the Palaearctic species of both *Acmaeodera* and *Acmaeoderella*, erecting new subgenera and species groups. *Buprestis flavofasciata* (= *B. taeniata*; see para. 2 above) was designated as the type species of the subgenus *Carininota* Volkovitsh, 1979 (p. 352) in *Acmaeoderella*. *Carininota* and *Buprestis flavofasciata* were placed on Official Lists in Opinion 2008 (BZN 59: 211–216, September 2002). After Cobos (1955, 1958) and Volkovitsh (1979), the names *Acmaeoderella* and *Acmaeodera* have been used in accord with the type designations (valid and invalid respectively) made by these authors and their meanings have been universally accepted (see Bílý, 1977, 1983; Mühle, 1980; Bellamy, 1985; Cobos, 1986; Holynski, 1993; Curletti, 1994; Kolibáč, 2001; Volkovitsh, 2001).

5. Nomenclatural chaos would be caused if Duponchel's type species designation were to be accepted and *B. taeniata* taken to be the type species of *Acmaeodera*. The name *Acmaeodera* would be applied to the 120 exclusively Palaearctic species currently placed in *Acmaeoderella* and its six subgenera, and the taxonomic subgenus now called *Carininota* would become the nominotypical subgenus *Acmaeodera* (*Acmaeodera*) (see para. 4 above and Article 44). The taxon now called *Acmaeoderella* (*Acmaeoderella*), with the type species *B. discoidea*, would become one of the subgenera of *Acmaeodera* with a new subgeneric name. The 495 species (in some 12 subgenera) currently in *Acmaeodera* would be placed in a genus with a name depending on taxonomic view, and the subgenus containing *B. cylindrica* Fabricius would need a new name.

6. To avoid the confusion that would result from over-turning the traditional stability of the genera *Acmaeodera* and *Acmaeoderella*, the type species designation of Duponchel (1841; see para. 2 above) should be set aside and the designation of Volkovitsh (1979; see para. 4 above) should be conserved.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all fixations of type species for the nominal genus *Acmaeodera* Eschscholtz, 1829 before that of *Buprestis cylindrica* Fabricius, 1775 by Volkovitsh (1979);
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Acmaeodera* Eschscholtz, 1829 (gender: feminine), type species *Buprestis cylindrica* Fabricius, 1775 by the fixation of Volkovitsh (1979) as ruled in (1) above;
 - (b) *Acmaeoderella* Cobos, 1955 (gender: feminine), type species by original designation *Buprestis discoidea* Fabricius, 1787;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *cylindrica* Fabricius, 1775, as published in the binomen *Buprestis cylindrica* (specific name of the type species of *Acmaeodera* Eschscholtz, 1829);

- (b) *discoidea* Fabricius, 1787, as published in the binomen *Buprestis discoidea* (specific name of the type species of *Acmaeoderella* Cobos, 1955).

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Case 3243***Lyda latifrons* Fallén, 1808 and *L. gyllenhali* Dahlbom, 1835 (currently *Pamphilius latifrons* and *P. gyllenhali*; Insecta, Hymenoptera): proposed conservation of usage of the specific names by designation of a neotype for *Lyda latifrons***

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Abstract. The purpose of this application, under Article 75.6 of the Code, is to conserve the existing usage of the names *Lyda latifrons* Fallén, 1808 and *Lyda gyllenhali* Dahlbom, 1835 (currently *Pamphilius latifrons* and *P. gyllenhali*) for two species of Palaearctic sawfly (family PAMPHILIIDAE) by designation of a neotype for *Lyda latifrons*. The holotype of *L. latifrons* is a specimen of *L. gyllenhali*, but acceptance of this would lead to the transfer of the name *L. latifrons* to the taxon always known as *L. gyllenhali*. It is proposed that current usage of these specific names is conserved by designating the lectotype of *L. maculosa* Zaddach, 1866 as the neotype of *Lyda latifrons*.

Keywords. Nomenclature; taxonomy; PAMPHILIIDAE; *Pamphilius latifrons*; *Pamphilius gyllenhali*; Palaearctic; sawflies.

1. Fallén (1808, p. 226) described a species of sawfly (sub-order Symphyta, family PAMPHILIIDAE) on the basis of only male specimens from Sweden and named it *Lyda latifrons*. The holotype was not traced in the Fallén, Dahlbom, or Thomson collections in Sweden and is probably lost (Beneš, 1976, p. 162). Since its original publication, Fallén's name, in its original combination or in the current combination of *Pamphilius latifrons*, has been constantly applied to a seldom collected but characteristic sawfly species. This species is distributed in Europe and eastern Siberia. Its larvae feed on poplar (*Populus* spp.) and probably also on willow (*Salix* spp.).

2. However, Vikberg (2002, p. 456) has shown that Fallén's original description of *Lyda latifrons* does not fit the male of the species currently known as *Lyda latifrons*. Fallén was actually describing a species that is currently known as *Pamphilius gyllenhali* (Dahlbom, 1835). The name of this taxon was originally published as *Lyda*

gyllenhali Dahlbom, 1835 (p. 40, fig. 1). As a result, the name *Pamphilius gyllenhali* is formally a junior synonym of the name *Pamphilius latifrons*, but it has not been used in this sense. The species currently known as *Pamphilius latifrons* (Fallén, 1808) is in fact conspecific with another type of sawfly that is known as *Pamphilius maculosus* (Zaddach, 1866) and originally named with the binomen *Lyda maculosa* Zaddach, 1866 (p. 166). Beneš (1976, p. 162) designated a female lectotype for *L. maculosa*, which he took to be conspecific with *P. latifrons* as normally understood. Blank et al. (1998, p. 26) agreed with this.

3. As explained in para. 2 above, the species that Fallén actually described and named *Lyda latifrons* has since been known as *Pamphilius gyllenhali* (Dahlbom, 1835). It is an uncommon but well known European species which, like *P. latifrons* auct. (= *P. maculosus*), is associated with willow (*Salix* spp.). It is under the name of *P. gyllenhali* that the taxon has been referred to in all literature concerning sawfly systematics, faunistics and biology. No synonyms have been recognized for this taxon. Klima (1937, p. 54) cited 21 references and Shinohara (1995, p. 49) gave an additional 48 references that use the name *Pamphilius gyllenhali*, including Zaddach (1866), Thomson (1871), André (1879–1882), Dalla Torre (1894), Konow (1897), Enslin (1917), Gussakovskij (1935), Berland (1947), Benson (1951), Chambers (1952), Móczár & Zombori (1973), Beneš (1974), Viitasaaari (1982), Achterberg & Aartsen (1986), Midtgaard et al. (1987), Pesarini & Pesarini (1988), Zhelochovtsev (1988), Magis (1994), Liston (1995) and Taeger et al. (1998).

4. The meaning of the name *Pamphilius gyllenhali* (Dahlbom, 1835) is well established in the entomological literature and it would not serve nomenclatural stability to allow this name to be replaced as a junior subjective synonym of the name *Pamphilius latifrons* (Fallén, 1808), especially as the name *Pamphilius latifrons* has been used until now for a different, but closely related species, also known as *P. maculosus* (Zaddach, 1866), that has a similar distributional range and possibly similar host-plants. In order to avoid any confusion in the future, we propose that the Commission conserves the names *P. latifrons* (Fallén, 1808) and *P. gyllenhali* (Dahlbom, 1835) in their current usage by designating a neotype for *Lydia latifrons* Fallén, 1808 that is conspecific with '*P. latifrons*' in the current sense and with *P. maculosus* (Zaddach, 1866). The most suitable specimen would be the female lectotype of *Lydia maculosa* Zaddach, 1866 designated by Beneš (1976, p. 162). The specimen is labelled 'Type' [red label], 'steckte mit maculosa', 'maculosa', 'Zool. Mus. Berlin'; 'Lectotype' [red label]. The underside of this label reads: 'maculosa Zd. Beneš, 1971', 'Pamphilius latifrons Fall. ♀ det. Beneš 71,' 'Pamphilius latifrons (Fallén) Det. A. Shinohara, 1995'. The specimen is kept in the Museum für Naturkunde, Berlin.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *latifrons* Fallén, 1808, as published in the binomen *Lyda latifrons*, and to designate the female specimen that is held in the Museum für Naturkunde, Berlin, and referred to in para. 4 above as the neotype;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *latifrons* Fallén, 1808, as published in the binomen *Lyda latifrons* and as defined by the neotype designated in (1) above;
 - (b) *gyllenhali* Dahlbom, 1835, as published in the binomen *Lyda gyllenhali*.

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Left — *Pamphilius latifrons* (Fallén, 1808), female specimen from Britain, length c. 12 mm.
Right — *Pamphilius gyllenhali* (Dahlbom, 1835), female specimen from Finland, length c. 10 mm.

Case 3225***Phymaturus* Gravenhorst, 1837 and *Lacerta palluma* Molina, 1782 (currently *Phymaturus palluma*; Reptilia, Sauria): proposed conservation of usage of the names by designation of a neotype for *Lacerta palluma* Molina, 1782**

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Abstract. The purpose of this application, under Article 75.6 of the Code, is to conserve the widespread existing usage of the generic name *Phymaturus* Gravenhorst, 1837 and the specific name *P. palluma* (Molina, 1782) for a genus and a species of lizard (family LIOLAEMIDAE) from South America by designating the holotype of *Centrura flagellifer* Bell, 1843 as the neotype of *Lacerta palluma* Molina, 1782. *Phymaturus* and *P. palluma* have been used in this sense since the name *L. palluma* was first misapplied by Gravenhorst in 1837. In this application it is accepted that the valid name for Molina's lizard species will be *Callopiastes maculatus* Gravenhorst, 1837.

Keywords. Nomenclature; taxonomy; Reptilia; LIOLAEMIDAE; TEIIDAE; *Callopiastes*; *Phymaturus*; *Callopiastes maculatus*; *Phymaturus palluma*; lizard; South America.

1. Molina (1782, p. 217) described a species of lizard (family TEIIDAE) from Chile and named it *Lucerta palluma* after an Araucanian Indian name; *palluma* is a noun in apposition. In the same work (1782, p. 345) and in its second edition (Molina, 1810, p. 189), Molina then used a different spelling for the generic name, referring to the taxon as *Lacerta palluma*. In so doing he acted as the First Reviser and selected *Lacerta palluma* as the valid spelling (see Article 24 of the Code).

2. Gravenhorst (1837, p. 749, pl. 55, fig. 2) placed what he thought was the nominal species *Lacerta palluma* Molina, 1782 in a new genus which he named (p. 749) *Phymaturus*. *Lacerta palluma* Molina, 1782 is thus the name of the type species by monotypy of *Phymaturus*. He illustrated a dorsal view of the lizard's head, but had misidentified Molina's taxon. Gravenhorst's lizard belongs to the family LIOLAEMIDAE, whereas Molina's lizard belongs to the family TEIIDAE. Molina's specific name *palluma* has been mistakenly applied to Gravenhorst's taxon for over 100 years.

3. Bell (1843, p. 25, pl. 14, fig. 2) described a new genus and species of lizard with the name *Centrura flagellifer* (family LIOLAEMIDAE). His illustration of the holotype (which is held in The Natural History Museum, London, with accession number BMNH 1946.8.29.84 and examined by R.E. in 1968) is clearly that of the species referred to as *Phymaturus palluma* by Gravenhorst (1837). Boulenger (1885, p. 184) synonymized *Centrura flagellifer* with *Phymaturus palluma* sensu Gravenhorst, 1837.

4. Cei & Lescure (1985, p. 452) showed that the species named *Lacerta palluma* by Molina (1782) is the lizard named *Callopiastes maculatus* by Gravenhorst, 1837 (p. 744; family TEIIDAE). *C. maculatus* is, by monotypy, the type species of *Callopiastes* Gravenhorst, 1837 (p. 743).

5. In an attempt to rectify the situation caused by Gravenhorst's misidentification of *Lacerta palluma* Molina, 1782, Cei & Lescure (1985, p. 456) used the next available generic name, *Centrura* Bell, 1843 (p. 25) whose type species by monotypy is *Centrura flagellifer* Bell, 1843 as the substitute name for *Phymaturus*.

6. Later, Lescure & Cei (1991, p. 174) decided on a new approach to resolving the confusion created by Gravenhorst's misidentification of *Lacerta palluma* Molina. They suggested that the Commission might use its plenary power to designate *Centrura flagellifer* Bell, 1843 as the type species of *Phymaturus* Gravenhorst, 1837, citing Article 70b of the second (1964) edition of the Code as the justification for this action. However, this proposal was never brought to the Commission.

7. Veloso et al. (2000, p. 258), following Cei & Lescure (1985), stated that the species described by Molina (1782) as *Lacerta palluma* is a senior synonym of the teiid lizard *Callopiastes maculatus* Gravenhorst, 1837. They designated a neotype (which is held in the National Museum of Natural History, Chile, with the accession number 2909) for *Lacerta palluma* in order to give 'taxonomic stability to the name *Callopiastes palluma* (Molina, 1782) and also the name [sic] *Phymaturus flagellifer* (Bell, 1843) = *Phymaturus palluma* [of authors other than Molina, 1782]'

8. In our opinion, none of the actions by Cei & Lescure (1985), Lescure & Cei (1991) or Veloso et al. (2000, p. 258) best serves nomenclatural stability. The lizard taxon mistakenly called *Phymaturus palluma* (Molina, 1782) by Gravenhorst in 1837 is of great scientific interest because of its herbivorous diet, viviparous reproduction, saxicolous habits, possession of sex chromosomes and occurrence at high elevations. As a result, it has appeared in numerous publications but under the incorrect name of *P. palluma* (Molina, 1782). Recent examples of usage of this name are de Queiroz, 1982; Arnold, 1984; Bee de Speroni, Cabrera & Manca, 1984; Lamborot & Navarro-Suarez, 1984; Shine, 1985; Etheridge & de Queiroz, 1988; Hallermann, 1994; Etheridge, 1995; Grimalt et al., 1995; McGuire, 1996; Reeder & Wiens, 1996; Schulte et al., 1998; Schulte et al., 1999 and Etheridge & Espinoza, 2000.

9. We propose that the Commission designate the holotype of *Centrura flagellifer* Bell, 1843 (see para. 3 above) as the neotype of *Lacerta palluma* Molina, 1782 to conserve the existing and widespread usage of the generic name *Phymaturus* Gravenhorst, 1837 and the specific name of *Lacerta palluma* Molina, 1782. Following this, *Centrura* and *C. flagellifer* Bell, 1844 will be junior objective synonyms of *Phymaturus* and *P. palluma* respectively, and the valid name for the lizard described by Molina will be *Callopiastes maculatus* Gravenhorst, 1837 (see para. 4 above).

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Lacerta palluma* Molina, 1782 and to designate the specimen BMNH 1946.8.29.84, referred to in para. 3 above, as the neotype;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Phymaturus* Gravenhorst, 1837 (gender: masculine), type species by monotypy *Lacerta palluma* Molina, 1782;

- (b) *Callopiastes* Gravenhorst, 1837 (gender: masculine), type species by monotypy *Callopiastes maculatus* Gravenhorst, 1838;
- (3) to place on the Official List of Specific Names in Zoology the following names:
- (a) *palluma* Molina, 1782, as published in the binomen *Lucerta* (sic) *palluma* and as defined by the neotype designated in (1) above (specific name of the type species of *Phymaturus* Gravenhorst, 1837);
- (b) *maculatus* Gravenhorst, 1837, as published in the binomen *Callopiastes maculatus* (specific name of the type species of *Callopiastes* Gravenhorst, 1837).

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Phymaturus palluma (Molina, 1782) from Sierra de Uspallata, Mendoza Province, Argentina.

Case 3240***Vespertilio nanus* Peters, 1852 (currently *Pipistrellus nanus*; Mammalia, Chiroptera): proposed conservation of the specific name**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the widely used name *Vespertilio nanus* Peters, 1852 (currently *Pipistrellus nanus*) for the African Banana bat (family VESPERTILIONIDAE). The name is threatened by limited use of a senior subjective synonym *P. africanus* (Rüppell, 1842).

Keywords. Nomenclature; taxonomy; Chiroptera; VESPERTILIONIDAE; *Pipistrellus nanus*; Banana bat; Africa.

1. Two bat (family VESPERTILIONIDAE) specimens collected from Shoa Province, Ethiopia, and lodged in the Museum of Frankfurt am Main (= S.M.F.), were catalogued with the registration numbers II.N.9*.a,b and were formally named as *Vespertilio pipistrellus* varietas *africanus* by Rüppell (1842, p. 156). Subsequently, Mertens (1925, p. 22) designated II.N.9*.a (now catalogued as S.M.F. 4306) as the lectotype of *V. pipistrellus africanus* (skin with skull not extracted) and classified it in a new synonymy as *Pipistrellus kuhlii africanus*. See Kock (2001) for an account of Rüppell's (1842) other specimen (II.N.9*.b).

2. Koopman (1975, pp. 399–400) examined the lectotype of *P. africanus* (by then its skull had been extracted), and stated that it represented a specimen of *Pipistrellus nanus* (Peters, 1852), and that the name *P. africanus* (Rüppell, 1842) was a senior synonym of *P. nanus* (Peters, 1852). The specific name of *P. nanus* was originally published in the binomen *Vespertilio nanus* Peters, 1852 (p. 63, pl. 16, fig. 2).

3. Kock (2001) examined and measured the lectotype and concluded that its characters and dimensions left no doubt that *V. pipistrellus africanus* represented the same taxon that is currently known as *P. nanus*.

4. Kock (2001) listed nine publications in which the senior name, *Pipistrellus africanus*, was adopted in place of *Pipistrellus nanus* (e.g. Ansell & Dowsett (1988, p. 41); Dowsett et al. (1991, p. 258) and Dumont et al. (1999, p. 160)). However, even though Koopman (1975, p. 399; see para. 2 above) identified the seniority of the name *P. africanus*, the name *Pipistrellus nanus* has continued to be widely used, occurring in at least 12 books on the mammals of Africa (e.g. Ansell (1978, p. 24); Delany & Happold (1979, pp. 91, 114, 134); Taylor (2000, pp. 105–107)). The name *P. nanus* was also used in Corbet & Hill (1986, p. 78); Koopman (1993, p. 222) and Nowak (1999, p. 427). These are three widely consulted books on the mammals of the world. It was also used in Hutson et al. (2001, pp. 30, 78), which is the I.U.C.N. Global Status Survey and Conservation Action Plan for Microchiropteran bats.

5. In addition, the name *P. nanus* has been used in at least 13 papers published after 1975 on the taxonomy and/or distributions of Chiroptera in various African countries or regions (e.g. Crawford-Cabral (1986, p. 17); Happold et al. (1987, p. 372) and Van Cakenberghe et al. (1999, pp. 305–306); this list is far from complete). The number of papers focused on reproduction, echolocation, diet and other non-taxonomic and non-distributional subjects, and referring to *P. nanus*, has not been assessed, but these papers are numerous.

6. Furthermore, there have been at least eight publications after 1975 focused on the biology or systematics of this species, with *Pipistrellus nanus* in their titles (e.g. Laval & Laval, 1977; Von Schliemann & Schlosser, 1978; Happold & Happold, 1990, 1996 and Bernard et al., 1997). Few (if any) other African microbats have received as much attention to their general biology as this species and, because they are frequently encountered in the furled leaves of banana plants, few species are so well known in Africa.

7. I am aware of at least four publications in which it has been suggested or implied that the name *P. nanus* should be conserved in the interests of nomenclatural stability. These are Largen et al. (1974, pp. 243–244); Ansell (1978, p. 24); Meester et al. (1986, pp. 53–54) and Grubb et al. (1998, p. 85).

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the specific name *africanus* Rüppell, 1842, as published in the trinomen *Vespertilio pipistrellus africanus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *nanus* Peters, 1852, as published in the binomen *Vespertilio nanus*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *africanus* Rüppell, 1842, as published in the trinomen *Vespertilio pipistrellus africanus* and as suppressed in (1) above.

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Case 3204***Viverra maculata* Gray, 1830 (currently *Genetta maculata*; Mammalia, Carnivora): proposed conservation of the specific name**

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 P.J. Taylor⁴, C. Stuart⁵, T. Stuart⁵ and W.C. Wozencraft⁶
 (Addresses on p. 47)

Abstract. The purpose of this application, under Article 23.9.5 of the Code, is to conserve the specific name of *Viverra maculata* Gray, 1830 (currently *Genetta maculata*; family VIVERRIDAE) for a species of African genet (a placental carnivore). The name is a junior primary homonym of *Viverra maculata* Kerr, 1792 (currently *Dasyurus maculatus*), which is used for a marsupial mammal commonly known as the Tiger quoll (family DASYURIDAE). However, the names apply to taxa that have not been considered congeneric since the early 19th century.

Keywords. Nomenclature; taxonomy; Carnivora; VIVERRIDAE; *Genetta maculata*; *Dasyurus maculatus*; Rusty-spotted genet; Africa.

1. Gray (1830; p. 9) described a new nominal species of African genet, which he named *Viverra maculata* (now *Genetta maculata*; family VIVERRIDAE). This species is commonly called the Rusty-spotted genet (see Crawford-Cabral, 1981).

2. *Viverra maculata* Gray, 1830 is a junior primary homonym of *Viverra maculata* Kerr, 1792 (p. 170), a name used for a marsupial (the Tiger quoll) that is now known scientifically as *Dasyurus maculatus* (family DASYURIDAE). This has led some authors to regard the junior name as invalid (see Crawford-Cabral, 1970, 1973, 1981; Rosevear, 1974; Coetzee, 1977; Ansell, 1978; Grubb et al., 1998). This was indeed the case until 2000, but the current edition of the Code (Article 23.9.5) prescribes that the case should be referred to the Commission to conserve the name *Genetta maculata* (Gray, 1830).

3. *Viverra maculata* Kerr, 1792 (marsupial mammal) and *Viverra maculata* Gray, 1830 (placental mammal) apply to taxa that have not been considered congeneric since the early 19th century. Indeed, Geoffroy Saint-Hilaire (1803, 1804) considered *Viverra maculata* Kerr, 1792 (the name of the marsupial mammal) to be a senior synonym of his own name *Dasyurus macrourus* Geoffroy Saint-Hilaire, 1803. From that time onwards, the marsupial species was included in the genera *Dasyurops* or *Dasyurus* (see Haltenorth, 1958; Mahoney & Ride, 1988; Groves, 1993) rather than in the genus *Viverra*. *Viverra maculata* Gray, 1830 (the name of the placental mammal) was considered by Gray (1843) to be a junior synonym of *Genetta senegalensis* (Fischer, 1829), although it was incorrect. Since Gray (1843), the nominal species *Viverra maculata* Gray, 1830 has been placed in *Genetta*, and not in *Viverra* (see Matschie, 1902; Schwartz, 1930; Schlawe, 1981).

4. There has been long debate about which specific name should be attributed to the species that is known in the vernacular as the Rusty-spotted genet. The name

Genetta rubiginosa Pucheran, 1855, which was commonly in use, can no longer be used since the type specimen associated with this name has been found to belong to another species that is currently known as *Genetta thierryi* Matschie, 1902 (see Schlawe, 1981; Crawford-Cabral, 1981; Crawford-Cabral & Fernandes, 1999; Gaubert et al., 2001). The only available name that has also been used to denote this species, either by including other species (see Schlawe, 1981; Fuller et al., 1990; Wozencraft, 1993; Angelici et al., 1999; Angelici, 2000) or exclusively (see Gaubert et al., 2002; Gaubert, in press), is *G. maculata* (Gray, 1830).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the specific name *maculata* Gray, 1830, as published in the binomen *Viverra maculata* (family VIVERRIDAE), is not invalid by reason of being a junior primary homonym of the specific name *maculata* Kerr, 1792, as published in the binomen *Viverra maculata* (family DASYURIDAE);
- (2) to place on the Official List of Specific Names in Zoology the name *maculata* Gray, 1830, as originally published in the binomen *Viverra maculata* (family VIVERRIDAE), ruled in (1) above to be not invalid by reason of being a junior primary homonym of the name *Viverra maculata* Kerr, 1792 (family DASYURIDAE).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*: they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Comments on the neotypification of Protists, especially Ciliates (Protozoa, Ciliophora)

(see BZN 59: 165–169)

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I am in agreement with my colleague Foissner that it is often impossible, when attempting to establish needed neotypification of species of ubiquitous or cosmopolitan microscopic protists (e.g. the ciliates; Finlay, 2002), to determine the exact or original type locality or, even if this is known and accessible, to guarantee the presence there of the same species at some particular later date. It follows that carefully studied material (considered by an expert to be identical) should be acceptable. New neotype material – when preserved on glass slides after proper fixation and staining – is to be favored over drawings or illustrations, often made long ago when only a few characteristics might have been known or thought important, even though the latter are acceptable under the Code as representing types for many organisms.

Proper neotype material, made available to workers around the world, will allow detailed three-dimensional re-examination of the specimens on the slide. Although today the modern techniques of electron microscopy and molecular studies are very helpful for analyses of taxonomic and evolutionary interrelationships among groups of protists, the morphological and anatomical details made visible – under light (including phase) microscopes of high magnification and high resolution – are still sufficient to differentiate morphospecies of the great majority of protists, certainly the ciliates (Lee & Soldo, 1992).

Further misidentifications and misnamings, still great problems in taxonomic protistology and thus biodiversity studies (Corliss, 2002) of these minute organisms, can be prevented by avoiding an over-rigid application of Article 75.3.6 of the Code, which requires that a neotype designation should provide ‘evidence that the neotype came as nearly as practicable from the original type locality’. The words ‘as nearly as practicable’ provide the required degree of flexibility.

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As an alpha-taxonomist working with protozoa, I fully agree with Foissner’s opinion. Almost all protozoa, especially the ciliates, have been subjected to a billion years of distribution and migration and must now be considered to be fully

cosmopolitan. The concept of a 'local species or taxon' is meaningless with regard to these animals. For example, *Paramecium caudatum* is morphologically and genetically similar throughout the world, even between continents such as Asia and Australia that have been separated for hundreds of millions of years.

I agree also that the lack of proper type material is causing great problems for colleagues working in a number of fields that relate to protozoan animals. Most described taxa do not have type material preserved. In some cases no material was retained and in other cases where material is available it is often poorly preserved and useless for identification.

In my opinion, Article 75.3.6 should be interpreted flexibly for protozoans and especially for free-living ciliates. This article should not become a barrier to the preparation where necessary of ciliate neotypes that will provide stability to the taxonomy and nomenclature of this important group of animals.

Comment on the proposed conservation of the generic names *Porites* Link, 1807, *Galaxea* Oken, 1815, *Mussa* Oken, 1815 and *Dendrophyllia* Blainville, 1830 (Anthozoa, Scleractinia)

(Case 2900; see BZN 52: 142–147, 328–329)

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I sympathize with the intent of Prof Potts's application. The DENDROPHYLLIIDAE are the dominant coral reef-dwelling hosts of the PETRARCIDAE, parasitic crustaceans that belong to my major group of interest, the Ascothoracida. Nonetheless, the Commission cannot properly act upon these proposals without a clear demonstration that the consequences of following the Code are intolerable. Examination of relevant literature kindly made available to me by Dr S.D. Cairns (*Smithsonian Institution*) shows that some parts of the application are unnecessary. In particular, the following points were not addressed by Prof Potts:

1. If *Porites* Link, 1807 is rejected as a junior homonym, what is the next available synonym to replace it (see Article 23.3.5 of the Code)? Has the next available synonym ever been widely used and how widely is it known now?

According to the synonymy provided by Wells (1956, p. F393), *Stylaraea* Milne-Edwards & Haime, 1851 is the next junior synonym of *Porites* Link, 1807, although only questionably. In fact, this genus, with a single living species, is generally regarded as separate from *Porites* within the PORITIDAE (see Veron, 1986, p. 234). If synonymy with *Stylaraea* is rejected, then *Cosmoporites* Duchassaing & Michelotti, 1860 and *Neoporites* Duchassaing & Michelotti, 1860 (published simultaneously) are the next and apparently only other junior synonyms available. Neither of these names has ever enjoyed the widespread usage hitherto accorded to *Porites* Link, and it would probably be undesirable to replace *Porites* with one of them.

2. If *Porites* Link, 1807 is rejected as a junior homonym of *Porites* Cuvier, 1798, the family name PORITIDAE Gray, 1842 must be replaced by the next available junior synonym or, lacking any, a name based on the replacement generic name (see Article 39). If there is an available junior synonym, what is it, has it ever been widely used, and how widely is it known now?

I have been unable to determine whether any family-group names based on other genera included in the PORITIDAE (or on their synonyms) have ever been proposed.

3. When were the names *Galaxea* and *Mussa* first published by an author later than Oken (1815)? If there are no intervening synonyms, these names could be retained and re-attributed to their proper authors and dates under the Code.

The first use of *Galaxea* following Oken (1815) was that of Milne-Edwards & Haime (1851, p. 70), who provided a diagnosis as well as a reference to Oken's work. According to Wells (1956, p. F412), *Galaxea* has no junior synonyms; therefore authorship of this genus could be attributed to Milne-Edwards & Haime, 1851 with no further repercussions. It is unnecessary to conserve Oken (1815) as author of this genus. Milne-Edwards & Haime (1851, pp. 70–71) included 13 nominal species in *Galaxea* without naming a type species. As *Galaxea fascicularis* was listed among them, Vaughan's (1918) designation of this species as the type species of *Galaxea* remains valid but the generic name remains threatened by *Porites* Cuvier, 1798, as described in Prof Potts's application.

According to Matthai (1928, p. 202), the first use of *Mussa* following Oken (1815) was by Dana (1848) [sic] (actually 1846, S.D. Cairns, pers. comm.). According to Wells (1956, p. F418), there is an intervening junior synonym *Lithodendron* Schweigger, 1819 which would thus replace *Mussa* if Oken's authority is not approved. Prof Potts stated that *Mussa* has perhaps only two valid species, so replacement of *Mussa* by *Lithodendron*, while undesirable, might not be intolerable. *Lithodendron* and *Mussa* share the same type species *Madrepora angulosa* Pallas, 1766 therefore the priority threat posed by *Porites* Cuvier also exists for *Lithodendron*.

4. Family-group names would not be endangered whether *Porites* Cuvier replaced *Galaxea*, *Mussa* or *Dendrophyllia* as a senior synonym. All three family-group names based on these genera (GALAXEINAE Vaughan & Wells, 1943, MUSSIDAE Ortmann, 1890 and DENDROPHYLLIDAE Gray, 1847) would remain unchanged because *Porites* Cuvier is not the basis of any available family-group name and because the replacement would have taken place after 1961 (see Article 40.2). It is unnecessary for them to be placed on the Official List of Family-Group Names in Zoology as Prof Potts has proposed.

5. What criteria should be used for choosing a type species for *Porites* Cuvier if it is not suppressed, and thus to determine whether *Porites* would replace *Galaxea*, *Mussa* or *Dendrophyllia*?

Dendrophyllia is by far the most speciose genus threatened. It serves as the basis of higher level taxa up to the suborder and has no problems of authorship so it should be retained under any circumstance. As shown above, *Galaxea* also has no problems of authorship or synonyms even if Oken (1815) remains disallowed. The generic name *Mussa* would be replaced anyway if not made available from Oken (1815) therefore its replacement by *Porites* Cuvier would probably be least disruptive of the three choices. Perhaps the application by Prof Potts could have been made simpler by including a designation of *Madrepora angulosa* as type species of *Porites* Cuvier, thus making *Mussa* its objective junior synonym. Then all that would be needed is conservation and inclusion in the Official List of *Mussa* (or *Lithodendron*, if the Commission votes against the availability of *Mussa* from Oken (1815)). *Dendrophyllia* and *Galaxea* would no longer require special attention in this regard.

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**Comments on the proposed conservation of the specific name of *Achatina janiï*
De Betta & Martinati, 1855 (currently *Cecilioides janiï*; Mollusca, Gastropoda)**
(Case 3233; see BZN **59**: 77–81)

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We ask the Commission, for the sake of universality in the scientific names of animals, not to make use of its plenary power to suppress the name *Cecilioides veneta* in favour of *C. janiï*. The reason for this is that we do not agree with Giusti & Manganelli (BZN **59**: 79) that *C. veneta* (Strobel, 1855) is a 'virtually unused name'. In the last hundred years, *C. veneta* has been used in two well-known monographs dealing with the malacofauna of the Südtirol (Riezler, 1929, p. 161) and the Dolomites (Thorson, 1930, p. 229). In addition, we do not agree with Giusti & Manganelli (BZN **59**: 77) that, after the publication of De Betta's work (1864), the specific name of *C. janiï* (De Betta & Martinati, 1855) was used 'by virtually all subsequent authors'. In fact, the name *C. aciculoides* (De Cristofori & Jan, 1832) was used for the snail species under consideration by Ehrmann (1933, p. 78), Eder (1914, p. 85), Mermod (1930, p. 371) and Jaekel (1962, p. 147). Only after Giusti's 1976 work was *C. janiï* used for this *Cecilioides* species.

Recently the name *C. veneta* has been used in two important monographs: the Checklist of the European Continental Mollusca (CLECOM checklist) (Falkner, Bank & von Proschwitz, 2001, p. 45) and the checklist of French continental molluscs (Falkner, Ripken & Falkner, 2002, pp. 42, 116). The primary goal of the CLECOM initiative is to produce a stable nomenclature for European non-marine molluscs by carrying out nomenclatural revisions based on the provisions of the Code. The CLECOM initiative is widely accepted.

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In their comment above, Bank, Falkner & Gittenberger have not produced a single argument to falsify the important points in our application (see paras. 6 and 7 in BZN **59**: 79). For example, they note that the name *Ceciliooides veneta* (Strobel, 1855) has been used in ‘two well-known monographs’ dealing with the malacofauna of the Südtirol (Riezler, 1929 and Thorson, 1930). However, Bank, Falkner & Gittenberger (2000, p. 100) recorded that they discovered the name *C. veneta* by ‘digging in the old literature’. If the name was so well known, why was ‘digging’ required to discover it? The use of *C. veneta* by Riezler and Thorson was noted in our application.

Bank, Falkner & Gittenberger also disagree that De Betta’s (1864) adoption of the name *Achatina jani* was followed by ‘virtually all subsequent authors’. We have shown this to be the case in our application. In para. 5 of our application, we recorded that there were at least 27 publications by 33 different authors between 1971 and 1999 (a period of 29 years) in which the name had been used. This considerable amount of usage contrasts with the two monographs and four references produced by Bank, Falkner & Gittenberger for the use of *C. veneta* during the last hundred years. These publications are demonstrably not all subsequent to the paper by Giusti (1976).

Some time ago (see Giusti, 1976, p. 234) it became clear to us that the continued use of the name *C. aciculoides* sensu De Betta (1852) by some authors (mainly German zoologists) occurred because De Betta’s papers (and those of other Italian authors who adopted the replacement name *C. jani*) remained unknown because of language difficulties.

Finally, Bank, Falkner & Gittenberger note that the aim of the CLECOM initiative is the production of a stable nomenclature for European non-marine molluscs based on the provisions of the Code. Obviously, this aim is not unique to the CLECOM group; all malacologists are concerned with this task. The CLECOM initiative may be ‘widely accepted’, but some of its proposals have been questioned by some malacologists. Bank, Falkner & Gittenberger themselves (2000) noted that ‘the name *Ceciliooides veneta* (Strobel, 1855) has to be used for a species which has in the past been referred to as *C. aciculoides* or *C. jani*’. Replacement of the well-known name *C. jani* is contrary to the Code and its provisions for maintaining stability in nomenclature (see Article 23.9.3).

Comment on the proposed conservation of usage of *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera) by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema*
(Case 3193; see BZN 59: 185–187, 281)

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I support this proposal wholeheartedly, as it will conserve the existing usage of the generic names for two large, well known and widely studied groups of beetles.

Comment on the proposed conservation of *Pelastoneurus* Loew, 1861 (Insecta, Diptera)
(Case 3130; see BZN 59: 196–197)

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We support the application of Brooks, Wheeler & Evenhuis (made under Article 23.9.3 of the Code) for conservation of the generic name *Pelastoneurus* Loew, 1861 by suppression of the generic name *Paracleius* Bigot, 1859. Although it is a junior synonym, the name *Pelastoneurus* has been used by almost all authors for this diverse and widespread genus of flies. Suppression of the generic name *Paracleius* has been previously recommended by Robinson (1970) and Dyte (1975).

Furthermore, use of the senior synonym *Paracleius* would continue to cause confusion with the generic name *Paraclius* Loew, 1864, which is used for a separate nominal genus with a nearly cosmopolitan distribution. The genus *Paraclius* was established by Loew (1864, p. 97) in the same publication in which he (pp. 99–100) considered *Paracleius* to be a senior subjective synonym of *Pelastoneurus*. In proposing the name *Paraclius*, Loew (1864) indicated that he was creating a new genus that was not congeneric with *Paracleius* Bigot, 1859. Loew stated (1864, pp. 99–100) that he saw ‘no inconvenience in retaining the newly coined name . . . *Paraclius*, for the new genus I intend to establish and to define here’. However, Kertész (1909, p. 230) emended the spelling of *Paracleius* Bigot, 1859 to *Paraclius* and listed *Paraclius* Kertész as a senior synonym of *Pelastoneurus* Loew. Apparently Kertész was not aware that his emended name was preoccupied by *Paraclius* Loew, 1864. This confusion has continued with several regional catalogues (namely Foote et al., 1965; Robinson, 1970; Dyte, 1975 and Negrobov, 1991, but not Dyte & Smith, 1980) incorrectly treating *Paraclius* Loew, 1864 as an emendation of *Paracleius* Bigot, 1859. Despite this confusion Robinson (1970) correctly listed *Paracleius* as a senior synonym of *Pelastoneurus*, although this synonymy was not listed in the other regional catalogues mentioned, including the one by Dyte & Smith (1980).

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Comment on the proposed conservation of the specific name of *Nemotois violellus* Herrich-Schaeffer in Stainton, 1851 (currently *Nemophora violella*; Insecta, Lepidoptera)

(Case 3188; see BZN 59: 30–33)

(1) Erik J. van Nieukerken

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1. I am not in agreement with the proposal put forward in this application. Kozlov's proposal to suppress the name *Tinea cupriacella* Hübner, 1819 in order to conserve the name of *Nemotois violellus* Herrich-Schaeffer in Stainton, 1851 (which he considers to be a junior synonym of *T. cupriacella*) centres around three problems. These are: (i) the status of Hübner's name, (ii) the parthenogenetic nature of the species currently known as *Nemophora cupriacella* (Hübner, 1819), and (iii) the supposed 'confusion' around the name *T. cupriacella*.

2. I agree with any action that will conserve the name *Nemophora violella*, but strongly disagree with the proposal to suppress the well-known name *Nemophora cupriacella* for the moth species that feeds on several Dipsacaceae species. The suppression of a name in use for 180 years as a result of re-examination of a very old plate does not follow the spirit of the Code. Thus, I would like to support the alternative proposal, indicated by Kozlov (BZN 59: 32), which involves the designation of a neotype for *Tinea cupriacella*. My argument in support of this approach follows the three points listed above.

The status of Hübner's name

3. *Tinea cupriacella* was made available only by an illustration of the moth. Type material is not known to exist and Hübner provided no description of the species. The moth shown on the colour plate is clearly an adelid moth, and resembles species of the genus *Nemophora*. The long antennae indicate that it is a male, and its identification by Kozlov as the species currently called *Nemophora violella* could be correct. However, the figure could also represent one of a number of related species, including the (unknown) male of *N. cupriacella* of present authors. All later authors based the identity of *N. cupriacella* on the works of Herrich-Schaeffer (1854, p. 96) and Zeller (1853, p. 57), who described and distinguished both *N. cupriacella* and *N. violella* (see below).

The parthenogenetic nature of the species currently known as *Nemophora cupriacella* (Hübner, 1819)

4. The parthenogenetic nature of *N. cupriacella* was not recognized before 1978 (Suomalainen, 1978). However, many earlier authors mentioned that they only knew

females of this species (e.g. Zeller, 1853 (p. 57); Herrich-Schaeffer, 1854 (p. 97); Frey, 1856 (p. 83); Stainton, 1859 (p. 301); Wocke 1874 (p. 47); Sorhagen, 1886 (p. 155); Disqué, 1901 (p. 201) and Razowski, 1978 (p. 83)).

5. Parthenogenesis is a relatively rare phenomenon in the Lepidoptera and best known in the family PSYCHIDAE (see Vandel, 1931; Robinson, 1971; Suomalainen, Lokki & Saura, 1979). At the moment there is no doubt that *N. cupriacella* is parthenogenetic in north and northwest Europe (see Suomalainen, 1978; K. Bland (pers. comm.); van Nieuwerkerken, 1993). However, no recent data are available for southern parts of Europe.

6. In many cases Lepidopteran parthenogenesis is not a universal condition (see Vandel, 1931; Robinson, 1971); bisexual populations may occur in parts of the distribution area. Even in fully parthenogenetic populations, males occur now and then as the result of a 'genetic defect'. Such males have been reported in the otherwise parthenogenetic nepticulid *Ectoedemia argyropeza* (Zeller, 1839) (see Bond & van Nieuwerkerken, 1987) and *Stigmella microtheriella* (Stainton, 1854) (see Laštůvka & Laštůvka, 1997 (p. 39); L. Aarvik, pers. comm.) and in the psychid *Luffia ferchaultella* (Stephens, 1828) (see Henderickx, 1982). Therefore, it is possible that male specimens of *N. cupriacella* do occur from time to time.

7. So even if *N. cupriacella* is a parthenogenetic species, it is still possible that Hübner had a male specimen either from an as yet unknown bisexual population or an incidental male from a parthenogenetic population.

The supposed 'confusion' around the name *T. cupriacella*

8. Kozlov's case is built on the alleged confusion around the name *T. cupriacella*. Actually, the usage of both the name *N. cupriacella* and the name *N. violella* has been relatively consistent since 1853.

9. Many authors could not understand why they were unable to find male *N. cupriacella* (e.g. Zeller, 1853 (p. 57); Herrich-Schaeffer, 1854 (p. 97)). It is striking that both these authors got their males from southern Europe. This could be an indication that bisexual populations existed there. On the other hand, they may have misidentified their specimens. Later authors (e.g. Heath & Pelham-Clinton, 1976; Küppers, 1980) mismatched several taxa in search for males of *N. cupriacella* and provided incorrect and confusing descriptions and illustrations of male specimens and their genitalia. However, this was not the case for the females.

10. According to Kozlov, the only feature that has been used consistently to distinguish between *N. cupriacella* and *N. violella* is their respective larval foodplants. However, there are two other characters that immediately separate the females of both species. These are the colour of the hairs on the labial palps and the length of the palps themselves. *N. cupriacella* has predominantly yellow hairs on longer palps (Figure 1). *N. violella* has completely black hairs on shorter palps (Figure 2). More interesting is that both Zeller (1853, pp. 58, 62) and Herrich-Schaeffer (1854, p. 97) use these characters in their descriptions, as do some of the later authors (e.g. Heinemann, 1870 (pp. 83–84); Snellen, 1882 (p. 498), Lycklama à Nijeholt, 1929 (p. 49)). To cite the last author (translated from Dutch): 'Snellen [in a paper in 1889] . . . considered both to be one species, but he did mention the clear difference in size and hairs of the palps given by Zeller'. Most other authors overlooked this character,

although Küppers (1980, p. 330) mentioned it for *N. cupriacella*, but not for *N. violella*.

11. Kozlov's remark that all authors relied on earlier sources for information relating to the larval foodplants of these species is overstated. Several authors did rear the species and could separate them successfully (e.g. Disqué, 1901 (p. 206); Stange in Disqué, 1901 (p. 206); Lycklama à Nijeholt, 1929 (p. 49); Lycklama à Nijeholt, 1932 (p. x)). The records of *Sedum* as hostplant for *N. cupriacella* go back to the record by Schmid (cited in Rössler, 1867) who found overwintering larvae on *Sedum*. However, *Sedum* is not the primary hostplant of *N. cupriacella*; its early stages are confined to flowers of Dipsacaceae. The early stages of *N. violella* are confined to flowers of *Gentiana* and *Gentianella*. In later larval instars they live on the soil, feeding on the basal leaves of their host plants and probably also on the leaves of other plants. Most current fieldworkers can easily recognise both species by their associated hostplants.

12. In conclusion, the identity of the figure labelled as *Tinea cupriacella* by Hübner cannot be unambiguously identified, but two taxonomic species known as *N. cupriacella* and *N. violella* have been recognised during the last 150 years (at least in female specimens) on the basis of Herrich-Schaeffer's and Zeller's descriptions. Many authors have misidentified their material, particularly male specimens, because the species are similar and males probably absent in *Nemophora cupriacella*. However, nomenclatural changes should not be used to cover up misidentifications and poor taxonomy. The names *N. cupriacella* and *N. violella* are well known amongst northern European lepidopterists and have in recent years also been used in nature conservancy reports (van Nieukerken, 1993). Change of one of these names into a completely new one as proposed by Kozlov should not be endorsed as it will upset nomenclatural stability.

13. I therefore propose that the existing usage of the names *N. cupriacella* and *N. violella* be maintained by designating a neotype for *T. cupriacella*. The most suitable specimen for the neotype is deposited in The Natural History Museum, London. The specimen has the following data labels: ♀, POLAND: Glogów; 'Scab. succisa | Torfwiesen | Glogau | Zeller 1/ [18]53'; 'Stainton Coll. Brit. Mus. | 1893-134'.

14. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Tinea cupriacella* Hübner, 1819 and to designate the specimen proposed in para. 13 above as neotype;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *cupriacella* Hübner, 1819, as published in the binomen *Tinea cupriacella* and as defined by the neotype designated in (1) above;
 - (b) *violellus* Herrich-Schäffer in Stainton, 1851, as published in the binomen *Nemotois violellus*.

Acknowledgements

A draft of this paper has been circulated for comments amongst a number of European lepidopterists. I am grateful for advice or comments from Jaroslav Buszko, Ole Karsholt, Mikhail Kozlov, Zdenek Laštůvka, Niels Peder Kristensen, Gaden Robinson, Klaus Sattler, Jan van Tol and Kevin Tuck.

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Figure 1.

Figure 1. *Nemophora cupriacella* (Hübner), female palps seen from lateral view: many yellow hairs and some black ones, relatively long palps (compared with eye width). Netherlands, Denekamp, 20.vii.1992, netted around *Succisa pratensis*, E.J. van Nieuwerkerken.

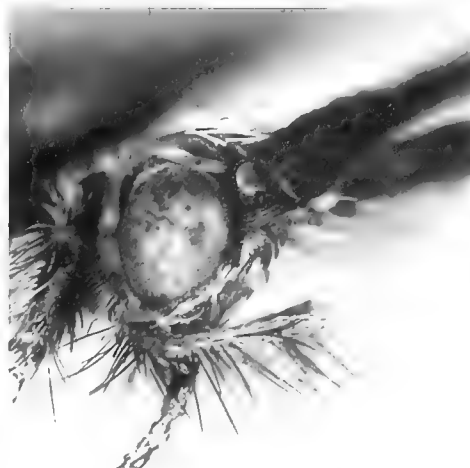


Figure 2.

Figure 2. *Nemophora violella* (Herrich-Schaeffer), female palps seen from lateral view: only some black hairs, shorter palps (compared with eye width). Netherlands, Staverden, 20.vii.1992, netted on wet heathland near *Gentiana pneumonanthe*, E.J. van Nieuwerkerken.

(2) Zdenek Laštůvka

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I am not in agreement with the proposal presented in Case 3188. Instead, I favour conservation of the name *N. cupriacella* (Hübner, 1819) for the species that feeds on *Scabiosa* and *Succissa* by designation of a neotype as suggested by Kozlev (BZN 59: 32) and outlined in detail by van Nieuwerkerken in comment (1) above. The spirit of the current Code does not support the suppression of a well understood name just because it may now be applied to a taxon other than that to which it was originally applied. Suppression of the name *N. cupriacella* would not be in the best interests of nomenclatural stability.

Comment on the proposed conservation of usage of the names *Phymaturus* Gravenhorst, 1837 and *Lacerta palluma* Molina, 1782 (currently *Phymaturus palluma*; Reptilia, Sauria) by designation of a neotype for *Lacerta palluma* Molina, 1782

(Case 3225; see BZN 60: 38–41)

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As a physical ecologist who studies *Phymaturus* lizards, I give my full support to this application. The unique biology of the lizards belonging to the genus *Phymaturus* Gravenhorst, 1837 and, in particular, the species currently known as *Phymaturus palluma* (Molina, 1782) is of great interest to physiologists, ecologists and behaviorists for a number of reasons. First, this species is herbivorous. As such, it occupies a trophic niche that is rarely exploited by modern reptiles and is virtually unknown among the smaller species (i.e. those with a body mass less than 40 g) such as *Phymaturus*. Second, the species currently known as *Phymaturus palluma* is viviparous (gives birth to live young) with an extraordinarily large offspring clutch mass relative to the body mass of the female. Third, females of this species appear to form close and lasting post-birth associations with their offspring (i.e. parental care), which is also quite rare among squamate reptiles. Finally, *Phymaturus palluma* lives in an extreme biotope at high elevations (to 4000 m) and under very dry conditions (less than 200 mm precipitation per year). This species has already been a focal point of numerous ecophysiological studies and will be the subject of many other research projects, allowing the investigation of phenomena not previously studied in squamate reptiles.

For these reasons it is imperative that the current usage of these names is conserved and stability established. The confusion of names in the literature caused by the actions by Cei, Lescure and Veloso et al. in various papers has already caused problems in communication and information retrieval. I urge the Commission to rule in favour of conserving the current usage of the names *Phymaturus* Gravenhorst, 1837 and *Phymaturus palluma* (Molina, 1782) by designation of a neotype for *Lacerta palluma* Molina, 1782.

OPINION 2016 (Case 2888)***Valdivianemertes* Stiasny-Wijnhoff, 1923 (Nemertea): not conserved**

Abstract. The Commission has ruled that priority should be maintained for the nemertean generic name *Akrostomum* Grube, 1840. A proposal had been made to conserve the junior objective synonym *Valdivianemertes* Stiasny-Wijnhoff, 1923.

Keywords. Nomenclature; taxonomy; Nemertea; CRATENEMERTIDAE: *Akrostomum*; *Valdivianemertes*; *Akrostomum stannii*.

Ruling

- (1) Proposals put forward for the conservation of the generic name *Valdivianemertes* Stiasny-Wijnhoff, 1923 were not approved.
- (2) The name *Akrostomum* Grube, 1840 (gender: neuter), type species by monotypy *Akrostomum stannii* Grube, 1840, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *stannii* Grube, 1840, as published in the binomen *Akrostomum stannii* (specific name of the type species of *Akrostomum* Grube, 1840), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
 - (a) *Valdivianemertes* Stiasny-Wijnhoff, 1923 (a junior objective synonym of *Akrostomum* Grube, 1840);
 - (b) *Acrostomum* Örsted, 1843 (an incorrect subsequent spelling of *Akrostomum* Grube, 1840).

History of Case 2888

An application for the conservation of the generic name *Valdivianemertes* Stiasny-Wijnhoff, 1923, which was threatened by the senior objective synonym *Akrostomum* Grube, 1840, was received from Frank B. Crandall (*Turkey Run Research Institute, McLean, Virginia, U.S.A.*) on 21 April 1993. After correspondence the case was published in BZN 51: 298–301 (December 1994). Notice of the case was sent to appropriate journals. No comments on this case were received.

The application was sent to the Commission for voting on 1 December 1995. The case received a majority of the votes cast but failed to reach the required two-thirds majority (17 votes in favour and 9 against). Voting against the application on 1 December 1995 Bouchet commented: 'the application cites five authors who have used *Valdivianemertes* since 1923; the present voting paper adds two. This points to a very limited usage of that name. Priority should apply'. As a result, the application was submitted for a second vote on 1 September 2002 under Bylaw 35.

No other comments were received in relation to this case before the second vote, even though the Commission Secretariat invited the author to provide additional support for the application.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to revote on the proposals published in BZN 51: 299.

At the close of the voting period on 1 December 2002 the votes were as follows: 14 Commissioners voted FOR the proposals, 10 Commissioners voted AGAINST, no votes were received from Böhme, Dupuis and Martins de Souza, Ng was on leave of absence.

Voting against Brothers commented: 'The fact that no further comments have been received reinforces the impression that strict adherence to priority would not cause major confusion in this case'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- Acrostomum* Örsted, 1843, *Naturhistorisk Tidsskrift* (Udgivet af H. Krøyer) Ræk. 1, 1837–1843, Bd. 4, p. 95.
- Akrostomum* Grube, 1840, *Actinien, Echinodermen und Würmer des Adriatischen- und Mittelmeers*, p. 57.
- stannii, Akrostomum*, Grube, 1840, *Actinien, Echinodermen und Würmer des Adriatischen- und Mittelmeers*, p. 57.
- Valdivianemertes* Stiasny-Wijnhoff, 1923, *Quarterly Journal of Microscopical Science*, 67: 643.

OPINION 2017 (Case 2983)***Achatinellastrum* Pfeiffer, 1854 and ACHATINELLIDAE Gulick, 1873
(Mollusca, Gastropoda): conserved**

Abstract. The Commission has ruled that the generic name *Achatinellastrum* Pfeiffer, 1854 for a terrestrial snail from Oahu (one of the Hawaiian islands) and the family-group name ACHATINELLIDAE Gulick, 1873 are conserved. These names were threatened by the unused senior subjective synonyms *Helicteres* Beck, 1837 and HELICTERINAE Pease, 1870, which have been suppressed except for homonymy.

Keywords. Nomenclature; taxonomy; Gastropoda; ACHATINELLIDAE; *Achatinella*; *Achatinellastrum*; tree snails; Hawaii.

Ruling

- (1) Under the plenary power the following names are suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *Helicteres* Beck, 1837;
 - (b) *Helicter* Pease, 1862.
- (2) The name *Achatinellastrum* Pfeiffer, 1854 (gender: neuter), type species by subsequent designation by Pilsbry & Cooke (1914) *Achatinella producta* Reeve, 1850, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *producta* Reeve, 1850, as published in the binomen *Achatinella producta* (specific name of the type species of *Achatinellastrum* Pfeiffer, 1854), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name ACHATINELLIDAE Gulick, 1873 (type genus *Achatinella* Swainson, 1828) is hereby placed on the Official List of Family-Group Names in Zoology.
- (5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
 - (a) *Helicteres* Beck, 1837, as suppressed in (1)(a) above;
 - (b) *Helicter* Pease, 1862, as suppressed in (1)(b) above.
- (6) The name HELICTERINAE Pease, 1870 is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (invalid because the name of the type genus has been suppressed).

History of Case

An application for the conservation the generic name *Achatinellastrum* Pfeiffer, 1854 together with the family name ACHATINELLIDAE Gulick, 1873 was received from Robert H. Cowie (*Center for Conservation Research and Training, University of Hawaii, Honolulu, Hawaii, U.S.A.*) and Neal L. Evenhuis (*Bishop Museum, Honolulu, Hawaii, U.S.A.*) on 3 May 1995. After correspondence the case was published in BZN 58: 188–192 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in *BZN* **58**: 190–191.

At the close of the voting period on 1 December 2002 the votes were as follows: 22 Commissioners voted **FOR** the proposals, 2 Commissioners voted **AGAINST**, Evenhuis abstained, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Voting against, Alonso-Zarazaga commented that ‘to achieve the goals intended by the proposal, there is no need to fully suppress these names as they could be needed when the phylogeny of these taxa is better known. I would be in agreement with a conditional suppression when these taxa are considered to be synonyms’. Likewise, Cogger commented: ‘In those groups whose taxonomy remains relatively fluid, experience indicates that subjective synonymy of two taxa is often removed with improved methods of taxonomic resolution. For this reason I oppose this specific case and generally oppose the suppression of senior subjective synonyms when precedence achieves the desired nomenclatural outcome of stability and universality while leaving the senior names available’.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Achatinellastrum Pfeiffer, 1854, *Malakozoologische Blätter*, **1**: 133.

ACHATINELLIDAE Gulick, 1873, *Proceedings of the Zoological Society of London*, **1873**: 89.

Helicter Pease, 1862, *Proceedings of the Zoological Society of London*, **1862**: 6.

Helicteres Beck, 1837, *Index Molluscorum* . . . , part 1, p. 51.

HELICTERINAE Pease, 1870, *Proceedings of the Zoological Society of London*, **1869**: 645.

producta, *Achatinella*, Reeve, 1850, *Achatinella*. Monograph of the genus. *Conchologia Iconica*, vol. 6, pl. 2, sp. 13.

OPINION 2018 (Case 3192)

BULIMINIDAE Kobelt, 1880 (Mollusca, Gastropoda): spelling emended to BULIMINUSIDAE, so removing the homonymy with BULIMINIDAE Jones, 1875 (Rhizopoda, Foraminifera); and ENIDAE Woodward, 1903 (1880) (Gastropoda): given precedence over BULIMINUSIDAE Kobelt, 1880

Abstract. The Commission has ruled that the homonymy between BULIMINIDAE Jones, 1875 (Foraminifera) and BULIMINIDAE Kobelt, 1880 (Gastropoda) is eliminated by emending the spelling of Kobelt's name to BULIMINUSIDAE. Both Jones's and Kobelt's names BULIMINIDAE are in use and refer, respectively, to a cosmopolitan foraminiferan family from the Cretaceous to Recent and to a group of terrestrial snails with Palearctic and Oriental taxa.

Keywords. Nomenclature; taxonomy; Foraminifera; Gastropoda; *Bulimina*; *Buliminus*; *Ena*; BULIMINIDAE; BULIMINUSIDAE; ENIDAE.

Ruling

- (1) Under the plenary power it is hereby ruled that:
 - (a) for the purposes of Article 29 of the Code the stem of the generic name *Buliminus* Beck, 1837 (Gastropoda) is BULIMINUS-;
 - (b) the family-group name ENIDAE Woodward, 1903 (1880) and other family-group names based on *Ena* Turton, 1831 are to be given precedence over BULIMINUSIDAE Kobelt, 1880 and other family-group names based on *Buliminus* Beck, 1837 whenever their type genera are placed in the same family-group taxon (Gastropoda).
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Bulimina* d'Orbigny, 1826 (gender: feminine), type species by subsequent designation by Cushman (1911) *Bulimina marginata* d'Orbigny, 1826 (Foraminifera);
 - (b) *Buliminus* Beck, 1837 (gender: masculine), type species by monotypy of the replaced nominal genus *Bulimina* Ehrenberg, 1831, *Bulimus labrosus* Olivier, 1804 (Gastropoda).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *marginata* d'Orbigny, 1826, as published in the binomen *Bulimina marginata* (specific name of the type species of *Bulimina* d'Orbigny, 1826) (Foraminifera);
 - (b) *labrosus* Olivier, 1804, as published in the binomen *Bulimus labrosus* (specific name of the type species of *Buliminus* Beck, 1837) (Gastropoda).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) BULIMINIDAE Jones in Griffith & Henfrey, 1875, type genus *Bulimina* d'Orbigny, 1826 (Foraminifera);

- (b) ENIDAE Woodward, 1903 (1880) (type genus *Ena* Turton, 1831) with the endorsement that it and other family-group names based on *Ena* are to be given precedence over BULIMINUSIDAE Kobelt, 1880 (type genus *Buliminus* Beck, 1837) and other family-group names based on *Buliminus* whenever their type genera are placed in the same family-group taxon (Gastropoda);
- (c) BULIMINUSIDAE Kobelt, 1880 (spelling emended by the ruling in (1)(a) above) (type genus *Buliminus* Beck, 1837) with the endorsement that it and other family-group names based on *Buliminus* are not to be given priority over ENIDAE Woodward, 1903 (1880) (type genus *Ena* Turton, 1831) and other family-group names based on *Ena* whenever their type genera are placed in the same family-group taxon (Gastropoda).
- (5) The name *Bulimina* Ehrenberg, 1831 (a junior homonym of *Bulimina* d'Orbigny, 1826) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (Gastropoda).
- (6) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
- (a) BULIMINIDAE Pfeiffer, 1879 (based on the junior generic homonym *Bulimina* Ehrenberg, 1831 and a junior homonym of BULIMINIDAE Jones in Griffith & Henfrey, 1875) (Gastropoda);
- (b) BULIMINIDAE Kobelt, 1880 (spelling emended to BULIMINUSIDAE in (1)(a) above) (Gastropoda);
- (c) BULIMINUINAE Schileyko, 1998 (an unjustified emendation and junior objective synonym of BULIMINUSIDAE Kobelt, 1880) (Gastropoda).

History of Case 3192

An application to remove the homonymy of the family-group name BULIMINIDAE Kobelt, 1880 (Mollusca, Gastropoda) with BULIMINIDAE Jones in Griffith & Henfrey, 1875 (Rhizopoda, Foraminifera) by emending the spelling of BULIMINIDAE Kobelt, 1880 to BULIMINUSIDAE and for the family-group name ENIDAE Woodward, 1903 (1880) (Gastropoda) to be given precedence over BULIMINUSIDAE Kobelt, 1880 was received from Bernhard Hausdorf (*Zoologisches Institut und Zoologisches Museum der Universität Hamburg, Hamburg, Germany*) on 5 February 2001. After correspondence the case was published in *BZN* 58: 182–187 (September 2001). The title, abstract and keywords of the case were published on the Commission's website.

A comment from Kadolsky concerning the stem of BULIMINIDAE Kobelt, 1880 was included on the voting paper.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in *BZN* 58: 184–185.

At the close of the voting period on 1 December 2002 the votes were as follows: 25 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Bulimina d'Orbigny, 1826, *Annales des Sciences Naturelles*, 7: 269.

Bulimina Ehrenberg, 1831, *Symbolae physicae seu icones et descriptiones animalium evertebratorum sepositis insectis, quae ex itineribus per Africam, Borealem et Asiam Occidentalem . . .*, 1. Pars zoologica. Animalia Evertebrata. Animalia Mollusca, p. [84].

BULIMINIDAE Jones in Griffith & Henfrey, 1875, *The micrographic dictionary*, Ed. 3, vol. 1, p. 320.

BULIMINIDAE Kobelt, 1880, *Illustriertes Conchylienbuch*, vol. 2, p. 272.

BULIMININAE Schileyko, 1998, *Treatise on Recent terrestrial pulmonate molluscs. Part 2. Ruthenica*, supplement 2: 183.

Buliminus Beck, 1837, *Index Molluscorum praesentis aevi musei principis augustissimi Christiani Frederici*, p. 68.

BULIMINUSIDAE Kobelt, 1880, *Illustriertes Conchylienbuch*, vol. 2, p. 272.

ENIDAE Woodward, 1903 (1880), *Proceedings of the Malacological Society of London*, 5(5): 310.

labrosus, *Bulimus*, Olivier, 1804, *Voyage dans l'Empire Othoman, l'Égypte et la Perse, fait par ordre du Gouvernement, pendant les six premières années de la République*, vol. 4, livraison 2, p. 30.

marginata, *Bulimina*, d'Orbigny, 1826, *Annales des Sciences Naturelles*, 7: 269.

OPINION 2019 (Case 2899)***Dodecaceria concharum* Örsted, 1843 and *Heterocirrus fimbriatus* Verrill, 1879 (currently *D. fimbriata*) (Annelida, Polychaeta): conservation of usage of the names by the designation of a neotype for *D. concharum* not approved**

Abstract. The Commission has ruled not to approve proposals for the conservation of usage of the names of two cirratulid polychaetes, *Dodecaceria concharum* Örsted, 1843 and *Heterocirrus fimbriatus* Verrill, 1879, by the designation of a neotype for *D. concharum*. No names have been placed on Official Lists or Indexes.

Keywords. Nomenclature; taxonomy; Polychaeta; cirratulid polychaetes; *Dodecaceria*; *Dodecaceria concharum*; *Heterocirrus fimbriatus*.

Ruling

- (1) Proposals put forward for the conservation of the usage of the specific names of *Dodecaceria concharum* Örsted, 1843 and *Heterocirrus fimbriatus* Verrill, 1879 by the designation of a neotype for *D. concharum* were not approved.

History of Case 2899

An application for the conservation of the specific names of *Dodecaceria concharum* Örsted, 1843 and *Heterocirrus fimbriatus* Verrill, 1879 by the designation of a neotype for *D. concharum* was received from P.H. Gibson (*Institute of Cell, Animal and Population Biology, University of Edinburgh, Edinburgh, U.K.*) and David Heppell (*National Museums of Scotland, Edinburgh, U.K.*) on 22 June 1993. After correspondence the case was published in BZN 52: 27–33 (March 1995). Notice of the case was sent to appropriate journals.

A comment opposing the application from F. Pleijel (*Swedish Museum of Natural History, Stockholm, Sweden* and *Tjärnö Marine Biological Laboratory, Strömstad, Sweden*) and A.S.Y. Mackie (*National Museum of Wales, Cardiff, Wales, U.K.*) was published in BZN 52: 261–262. Heppell & Gibson replied (BZN 52: 329–331) in defence of their proposals.

A further comment opposing the application was received from T. Miura (*Kagoshima University, Kagoshima, Japan*) and A.I. Muir (*The Natural History Museum, London, U.K.*) representing the Nomenclatural Sub-Committee of the International Polychaete Association and was published in BZN 53: 46.

A long and detailed submission was received on 15 December 1995 from M.E. Petersen (*Zoological Museum, University of Copenhagen, Copenhagen Ø, Denmark*), J.D. George (*The Natural History Museum, London, U.K.*), J.A. Blake (*ENSR Consulting and Engineering Inc., Woods Hole, MA, U.S.A.*), K. Fauchald (*National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.*) and K.W. Ockelmann (*Marine Biological Laboratory, University of Copenhagen, Helsingør, Denmark*). This was primarily a taxonomic paper, but it opposed Gibson & Heppell's requests (1), (3) and (4) to the Commission and made counter-proposals

for the designation of neotypes. Dr Petersen et al. were encouraged to publish the taxonomic content of this submission elsewhere before bringing the nomenclatural aspects to the Commission. However, the paper was not published and their counter-proposals were not put to the Commission for a vote.

No further comments on this case were received.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in **BZN 52**: 31–32.

At the close of the voting period on 1 December 2002 the votes were as follows: 1 Commissioner voted **FOR** the proposals, 23 Commissioners voted **AGAINST**, no votes were received from Böhme, Dupuis and Martins de Souza, Ng was on leave of absence.

No names are placed on Official Lists or Indexes and the issue is left open for subsequent workers to follow the precepts of the Code or to make new proposals to the Commission.

OPINION 2020 (Case 3078)***Diastylis* Say, 1818 (Crustacea, Cumacea): *Cuma rathkii* Krøyer, 1841 designated as type species**

Abstract. The Commission has designated *Cuma rathkii* Krøyer, 1841 as the type species of the cumacean genus *Diastylis* Say, 1818, replacing *D. arenarius* Say, 1818, the original type species. The original material of *D. arenarius* is lost and the taxon is not identifiable from its description.

Keywords. Nomenclature; taxonomy; Crustacea; Cumacea; DIASTYLIDAE: *Diastylis*; *Diastylis rathkii*.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Diastylis* Say, 1818 are hereby set aside and *Cuma rathkii* Krøyer, 1841 is designated as the type species.
- (2) The name *Diastylis* Say, 1818 (gender: feminine), type species by designation in (1) above *Cuma rathkii* Krøyer, 1841, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *rathkii* Krøyer, 1841, as published in the binomen *Cuma rathkii* (specific name of the type species of *Diastylis* Say, 1818) and defined by the lectotype in the Zoological Museum of the University of Copenhagen ZMUC-CRU-7936, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3078

An application to designate *Cuma rathkii* Krøyer, 1841 as the type species of the genus *Diastylis* Say, 1818 was received from Sarah Gerken (*Darling Marine Center, University of Maine, Walpole, Maine, U.S.A.*) on 20 January 1998. After correspondence the case was published in BZN 56: 174–176 (September 1999).

A comment in support of the application from L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) (BZN 57: 45–46) pointed out that the doubtful identity of the type species of *Diastylis* ‘has been known for a long time’ and that ‘the most suitable type species would be *Cuma rathkii* Krøyer, 1841’. Holthuis also pointed out that, although para. 1 of the application stated that *D. arenarius* is the type species by monotypy, Say (1818, pp. 315–316) indicated that three nominal species were included in the genus. The first fixation of a type species was by Fowler (1912, p. 534) who cited *D. arenarius* in the belief that the genus was originally monotypic. As the type material consists of several specimens from the two localities (mentioned in para. 5) Holthuis considered that it would be advisable to select a lectotype for *C. rathkii* in case the existing syntypes are found to represent more than one taxon. A lectotype for the nominal species *C. rathkii* Krøyer, 1841 (specimen ZMUC-CRU-7936 in Copenhagen) was designated by Gerken in BZN 58: 305 in reply to the comment by L.B. Holthuis.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN **56**: 175.

At the close of the voting period on 1 December 2002 the votes were as follows: 25 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Diastylis Say, 1818, *Journal of the Academy of Natural Sciences of Philadelphia*, **1**(11): 313.
rathkii, Cuma, Krøyer, 1841, *Naturhistorisk Tidsskrift*, **3**(6): 513.

OPINION 2021 (Case 3048)**NYMPHULINAE Duponchel, 1845 (Insecta, Lepidoptera): not given precedence over ACENTROPINAE Stephens, 1835**

Abstract. The Commission has ruled that priority should be maintained for the crambid moth subfamily name ACENTROPINAE Stephens, 1835. A proposal had been made to give precedence to the subjective synonym NYMPHULINAE Duponchel, 1845.

Keywords. Nomenclature; taxonomy; Lepidoptera; ACENTROPINAE; NYMPHULINAE; *Acentropus*; *Nymphula*; *Acentropus garnonsii*; *Phalaena stagnata*; aquatic caterpillars.

Ruling

- (1) The family-group name NYMPHULINAE Duponchel, 1845 and other family-group names based on *Nymphula* Schrank, 1802 are not to be given priority over ACENTROPINAE Stephens, 1835 and other family-group names based on *Acentropus* Curtis, 1834 whenever they are considered to be synonyms. The Principle of Priority is to be upheld and ACENTROPINAE Stephens, 1835 has priority over NYMPHULINAE Duponchel, 1845 whenever they are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) ACENTROPINAE Stephens, 1835, with the endorsement that it has priority over NYMPHULINAE Duponchel, 1845 (in accordance with the Principle of Priority) whenever the two names are considered to be synonyms;
 - (b) NYMPHULINAE Duponchel, 1845, with the endorsement that it is not to be given precedence over ACENTROPINAE Stephens, 1835 whenever the two names are considered to be synonyms.
- (3) The name *Acentropus* Curtis, 1834 (gender: masculine) type species by original designation *Acentropus garnonsii* Curtis, 1834 (generic name of the type genus of ACENTROPINAE Stephens, 1835) is hereby placed on the Official List of Generic Names in Zoology.
- (4) The name *garnonsii* Curtis, 1834, as published in the binomen *Acentropus garnonsii* (specific name of the type species of *Acentropus* Curtis, 1834), is hereby placed on the Official List of Specific Names in Zoology.
- (5) The name *Nymphula* Schrank, 1802 already appears on the Official List of Generic Names in Zoology (see Opinion 1406), but the entry is herewith emended to record that *Nymphula* Schrank, 1802 is the generic name of the type genus of NYMPHULINAE Duponchel, 1845.
- (6) The name *stagnata* Donovan, 1806, as published in the binomen *Phalaena stagnata* (specific name of the type species of *Nymphula* Schrank, 1802), already appears on the Official List of Specific Names in Zoology (see Opinion 1406) and no emendment to the List is necessary.

History of Case 3048

An application for conservation of the usage of the name NYMPHULINAE Duponchel, 1845 by giving it precedence over the name ACENTROPINAE Stephens, 1835 whenever the two names are regarded as synonyms was received from M. Alma Solis (*Systematic Entomology Laboratory, Agriculture Research Service, USDA, National Museum of Natural History, Washington, D.C., U.S.A.*) on 9 June 1997. After correspondence the case was published in BZN 56: 31–33 (March 1999). Notice of the case was sent to appropriate journals.

Comments opposing the application were published in BZN 57: 46–48 (March 2000) and BZN 59: 131–132. Comments in support of the application were published in BZN 58: 305–306, BZN 59: 38–40 and BZN 59: 132.

The application was sent to the Commission for voting on 1 March 2001. The case received a majority of the votes cast but failed to reach the required two-thirds majority (11 votes FOR and 9 AGAINST; one Commissioner abstained).

On 1 September 2002 the application was submitted for a second vote under Bylaw 35. An additional comment received from Ernst Arenberger (*Börnergasse, Wien, Austria*) was added to the voting paper: 'The name ACENTROPINAE has been selected by Speidel (1981, 1984) as the oldest name for a complex of genera. Meanwhile, the name was used in 1994 by Arenberger. This name should be maintained for the sake of stability'.

Additional reference

Arenberger, A. 1994. Zusammenfassende Darstellung der Mikrolepidopterenfauna Zyperns. *Annales Musei Goulandris*, 9: 253–336.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to revote on the proposals published in BZN 56: 32.

At the close of the voting period on 1 December 2002 the votes were as follows: 15 Commissioners voted FOR the proposals, 9 Commissioners voted AGAINST, Martins de Souza abstained, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Voting against, Brothers commented: 'This proposal does not concern rejection of the attempted resurrection of a forgotten name, but is an attempt to subvert a major principle of the Code as applied in a relatively recent case of synonymy. To approve it would damage the foundations of the Code'.

Original references

The following are the original references to names placed on Official Lists by the ruling given in the present Opinion:

- ACENTROPINAE Stephens, 1835, *Illustrations of British entomology, Mandibulata*, p. 148.
NYMPHULINAE Duponchel, 1845, *Catalogue méthodique des Lépidoptères d'Europe*, p. 201.
Acentropus Curtis, 1834, *British Entomology*, 11: folio 497.
garnonsii, *Acentropus*, Curtis, 1834, *British Entomology*, 11: folio 497.

OPINION 2022 (Case 3197)***Glassia* Davidson, 1881 (Brachiopoda): *G. elongata* Davidson, 1881 designated as the type species**

Abstract. The Commission has ruled that the current usage of *Glassia* Davidson, 1881 and *Lissatrypa* Twenhofel, 1914 for two important genera of smooth-shelled Silurian brachiopods with radically different internal structure is conserved. Davidson designated *Atrypa obovata* Sowerby, 1839 as the type species of *Glassia*, but this species is now known from its internal structure to be a species of the genus *Lissatrypa* (type species *L. atheroidea* Twenhofel, 1914). To avoid synonymy between *Glassia* and *Lissatrypa*, the species *Glassia elongata* Davidson, 1881 has been designated as type species of *Glassia*.

Keywords. Nomenclature; taxonomy; Brachiopoda; GLASSIIDAE; LISSATRYPIDAE; *Glassia*; *Lissatrypa*; *Glassia elongata*; *Lissatrypa atheroidea*; Silurian.

Ruling

- (1) Under the plenary power, all previous fixations of type species for the nominal genus *Glassia* Davidson, 1881 are hereby set aside and *Glassia elongata* Davidson, 1881 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Glassia* Davidson, 1881 (gender: feminine), type species by designation in (1) above *Glassia elongata* Davidson, 1881;
 - (b) *Lissatrypa* Twenhofel, 1914 (gender: feminine), type species by original designation and monotypy *Lissatrypa atheroidea* Twenhofel, 1914.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *elongata* Davidson, 1881, as published in the binomen *Glassia elongata* (specific name of the type species of *Glassia* Davidson, 1881);
 - (b) *atheroidea* Twenhofel, 1914, as published in the binomen *Lissatrypa atheroidea* (specific name of the type species of *Lissatrypa* Twenhofel, 1914).

History of Case 3197

An application to conserve the current usage of the generic names *Glassia* Davidson, 1881 and *Lissatrypa* Twenhofel, 1914 for two important genera of smooth-shelled Silurian brachiopods by the designation of *Glassia elongata* Davidson, 1881 as type species of *Glassia* was received from Paul Copper (*Laurentian University, Sudbury, Canada*) on 22 February 2001. After correspondence the case was published in BZN 58: 288–290 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 289.

At the close of the voting period on 1 December 2002 the votes were as follows: 24 Commissioners voted FOR the proposals, 1 Commissioner voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

atheroidea, *Lissatrypa*, Twenhofel, 1914, *Museum Bulletin, Canadian Geological Survey*, 3: 33.

elongata, *Glassia*, Davidson, 1881, *Geological Magazine*, (2)8(4): 148.

Glassia Davidson, 1881, *Geological Magazine*, (2)8(1): 11.

Lissatrypa Twenhofel, 1914, *Museum Bulletin, Canadian Geological Survey*, 3: 31.

OPINION 2023 (Case 3195)***Polonograptus* Tsegelnjuk, 1976 (Graptolithina): *P. podoliensis* Přibyl, 1983 designated as the type species**

Abstract. The Commission has ruled that the current usage of the generic name *Polonograptus* Tsegelnjuk, 1976 for an Upper Ludlow monograptid is conserved by the designation of *P. podoliensis* Přibyl, 1983 as the type species of *Polonograptus*, instead of *P. butovicensis* (Bouček, 1936).

Keywords. Nomenclature; taxonomy; Graptolithina; *Polonograptus*; *Polonograptus podoliensis*; Silurian.

Ruling

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Polonograptus* Tsegelnjuk, 1976 are hereby set aside and *Polonograptus podoliensis* Přibyl, 1983 is designated as the type species.
- (2) The name *Polonograptus* Tsegelnjuk, 1976 (gender: masculine), type species by designation in (1) above *Polonograptus podoliensis* Přibyl, 1983, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *podoliensis* Přibyl, 1983, as published in the binomen *Polonograptus podoliensis* (specific name of the type species of *Polonograptus* Tsegelnjuk, 1976), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *Alexandrograptus* Přibyl, 1981 (unavailable because disclaimed by its author in the original publication) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 3195

An application to conserve the current usage of the generic name *Polonograptus* Tsegelnjuk, 1976 for an Upper Ludlow monograptid by designating *P. podoliensis* Přibyl, 1983 as the type species was received on 10 February 2001 from J.F.V. Riva (*Quebec Geoscience Centre, University of Quebec, Ste-Foy, Canada*), T.N. Koren' (*VSEGEI, Srednij Prospect 74, St Petersburg, Russia*) and R.B. Rickards (*Department of Earth Sciences, University of Cambridge, Cambridge, U.K.*). After correspondence the case was published in BZN 58: 291–293 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 293.

At the close of the voting period on 1 December 2002 the votes were as follows: 24 Commissioners voted FOR the proposals, 1 Commissioner voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- Alexandrograptus* Přibyl, 1981, *Věstník Ústředního ústavu geologického*, **56**(6): 373.
podoliensis, *Polonograptus*, Přibyl, 1983, *Časopis pro mineralogii a geologii*, **28**(2): 158.
Polonograptus Tsegel'nyuk, 1976, *Paleontologiya i stratigrafiya verchnego Dokembriya i nynynego Paleozoya jugo-zapada vostočno-evropeyskoj platformy*, pp. 124–125.

OPINION 2024 (Case 3140)***Sceloporus occidentalis* Baird & Girard, 1852 (Reptilia, Sauria):
rediscovered syntypes replaced by a neotype**

Abstract. The Commission has designated a neotype for the Pacific blue-bellied lizard *Sceloporus occidentalis* Baird & Girard, 1852 (family PHRYNOSOMATIDAE) from the west coast ranges of North America. The neotype, originally designated in 1954, is a well preserved adult specimen of known provenance and replaces two missing syntypes which have recently been rediscovered but which are immature specimens and do not distinguish *S. occidentalis* from closely related taxa.

Keywords. Nomenclature; taxonomy; Reptilia; Sauria; PHRYNOSOMATIDAE; *Sceloporus occidentalis*; Pacific blue-bellied lizards; western North America.

Ruling

- (1) Under the plenary power all previous type fixations for the nominal species *Sceloporus occidentalis* Baird & Girard, 1852 are set aside and the specimen no. MVZ 59874 in the Museum of Vertebrate Zoology, University of California, is designated as the neotype.
- (2) The name *occidentalis* Baird & Girard, 1852, as published in the binomen *Sceloporus occidentalis* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3140

An application to replace the two rediscovered syntypes of the Pacific blue-bellied lizard *Sceloporus occidentalis* Baird & Girard, 1852 (family PHRYNOSOMATIDAE) from the west coast ranges of North America by a neotype was received from Edwin L. Bell (*Albright College, Reading, Pennsylvania, U.S.A.*), and Hobart M. Smith and David Chiszar (*University of Colorado, Boulder, Colorado, U.S.A.*) on 2 September 1999. After correspondence the case was published in BZN 58: 224–226 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 226.

At the close of the voting period on 1 December 2002 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Kerzhner abstained, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:
occidentalis. *Sceloporus*, Baird & Girard, 1852, *Proceedings of the Academy of Natural Sciences of Philadelphia*, 6: 175.

OPINION 2025 (Case 3191)***Pareiasaurus karpinskii* Amalitzky, 1922 (currently *Scutosaurus karpinskii*; Reptilia, Pareiasauria): specific name conserved**

Abstract. The Commission has ruled that the specific name and typification of *Pareiasaurus karpinskii* Amalitzky, 1922, an abundant fossil pareiasaurian reptile from the Russian Permian, are conserved. The specific name was threatened by a different spelling that had inadvertently been published five years earlier when the full description was delayed by war and by Amalitzky's death.

Keywords. Nomenclature; taxonomy; Reptilia; Pareiasauria; PAREIASAURIDAE; *Scutosaurus*; *Scutosaurus karpinskii*; Permian; Russia.

Ruling

- (1) Under the plenary power the specific name *karpinskyi* Watson, 1917, as published in the binomen *Pariasaurus* [sic] *karpinskyi*, is hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.
- (2) The name *Scutosaurus* Hartmann-Weinberg, 1930 (gender: masculine), type species by monotypy *Pareiasaurus karpinskii* Amalitzky, 1922, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *karpinskii* Amalitzky, 1922, as published in the binomen *Pareiosaurus* [sic] *karpinskii*, an incorrect spelling of *Pareiasaurus karpinskii*, (specific name of the type species of *Scutosaurus* Hartmann-Weinberg, 1930) and defined by the holotype in the Palaeontological Institute of the Russian Academy of Sciences in Moscow PIN 2005/1532, is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *karpinskyi* Watson, 1917, as published in the binomen *Pariasaurus* [sic] *karpinskyi* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3191

An application for the conservation of the specific name and typification of the taxon currently known as *Scutosaurus karpinskii* (Amalitzky, 1922) was received from Michael S.Y. Lee (*The South Australian Museum, Adelaide, Australia*) on 2 February 2001. After correspondence the case was published in *BZN* 58: 220–223 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on the case were received.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in *BZN* 58: 221.

At the close of the voting period on 1 December 2002 the votes were as follows: 25 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- karpinskii*, *Pareiasaurus*, Amalitzky, 1922, *Izvestiya Rossiiskoi Akademii Nauk*, (6)**16**: 334–335.
karpinskyi, *Pariasaurus* [sic], Watson, 1917, *Journal of Anatomy*, **52** (3rd series, vol. 13): 10.
Scutosaurus Hartmann-Weinberg, 1930, *Paläontologische Zeitschrift*, **12**(1): 59.

OPINION 2026 (Case 3044)**Generic and specific names of birds (Aves) conventionally accepted as published in the *Proceedings or Transactions of the Zoological Society of London* and monographic works by John Gould and other contemporary zoologists: suppression of prior usages not approved**

Abstract. The Commission has ruled not to approve proposals for the conservation of a large number of generic and specific names of birds in their conventionally accepted places of publication. The problem arose from the 19th century practice of publishing meeting reports of the Zoological Society of London in certain London periodicals, making some names available from those periodicals rather than from subsequent formal publications of the Zoological Society. A proposal had been made to suppress the earlier usages of names in periodicals in order to maintain stability of the formal source references. No names are placed on Official Lists or Indexes.

Keywords. Nomenclature; taxonomy; Aves; J. Gould; G.R. Gray; R. Owen; *Proceedings and Transactions of the Zoological Society of London*.

Ruling

- (1) Proposals put forward for the conservation of a number of generic and specific names of birds in their conventionally accepted places of publication by the suppression of prior usages in certain London periodicals were not approved.

History of Case 3044

An application for the conservation of a large number of generic and specific names of birds in their conventionally accepted places of publication was submitted on 19 February 1997 by Richard Schodde (*Australian National Wildlife Collection, CSIRO, Lyneham, Australia*) and Walter J. Bock (*Department of Biological Sciences, Columbia University, New York, U.S.A.*) on behalf of the Standing Committee on Ornithological Nomenclature (SCON).

The names refer to new taxa presented at meetings of the Zoological Society of London and traditionally accepted as available from descriptions published in the *Proceedings or Transactions of the Zoological Society*. However, it is now known that some of the names, or variants of them, had first appeared in a number of periodicals (including *The Athenaeum*, *The Literary Gazette* and *The Analyst*), which carried reports of the meetings of the Zoological Society. The objective of the application was to maintain availability of the names in question from their conventionally accepted places of publication by suppression of the earlier, but hitherto unknown, usages of those names.

After correspondence the case was published in BZN 54: 172–182 (September 1997). Notice of the case was sent to appropriate journals.

An opposing comment from Dr Storrs L. Olson was published in BZN 55: 176–181 (September 1998). A reply from the authors of the application was published at the same time (BZN 55: 181–185), incorporating some emendations to the original

proposals. A further opposing comment from Drs Murray D. Bruce and Ian A.W. McAllan was published in **BZN 56**: 274–279 (December 1999), together with a reply from the originating authors (**BZN 56**: 279–280). An additional comment from Bruce & McAllan was published in **BZN 57**: 113 (June 2000).

The amendments (**BZN 55**: 184–185; September 1998) made by Schodde and Bock to their original application were incorporated in the proposals for voting. Further amendments derived from these comments or inherent in the case were listed in the voting paper.

Decision of the Commission

On 1 March 2001 the members of the Commission were invited to vote on the proposals published in **BZN 54**: 175–181 with the amendments set out in **BZN 55**: 184–185 and the additional proposals listed in the voting paper.

At the close of the voting period on 1 June 2001 the votes were as follows: 9 Commissioners voted **FOR** the proposals, 11 Commissioners voted **AGAINST**, Alonso-Zarazaga abstained, no votes were received from Dupuis and Song.

Some of the Commissioners who voted against the Application commented that case-by-case consideration of individual names would have been preferable, and the suggestion was made that the Commission should not concern itself with original source references where the stability of the actual name was not endangered.

No names are placed on Official Lists or Indexes so as to allow for any future proposals relating to names where there are nomenclatural problems that need to be resolved.

OPINION 2027 (Case 3010)**Usage of 17 specific names based on wild species which are pre-dated by or contemporary with those based on domestic animals (Lepidoptera, Osteichthyes, Mammalia): conserved**

Abstract. The Commission has conserved the usage of 17 specific names based on wild species, which are pre-dated by or contemporary with those based on domestic forms. The majority of wild progenitors and their domestic derivatives share the same name, but in the 17 cases considered (1 Lepidoptera, 1 Osteichthyes and 15 Mammalia) the wild and domestic forms have been separately named and this has created confusion.

Keywords. Nomenclature; taxonomy; Mammalia; Perissodactyla; Artiodactyla; Rodentia; Carnivora; Lepidoptera; Osteichthyes; names for wild species with domestic derivatives; *Equus africanus*; *Equus ferus*; *Camelus ferus*; *Lama guanicoe*; *Vicugna vicugna*; *Bos primigenius*; *Bos gaurus*; *Bubalus arnee*; *Bos mutus*; *Capra aegagrus*; *Ovis orientalis*; *Cavia aperea*; *Canis lupus*; *Mustela putorius*; *Felis silvestris*; *Carassius gibelio*; *Bombyx mandarina*; ass; tarpan; Bactrian camel; guanaco; vicuña; aurochs; gaur; water buffalo; yak; bezoar; Asian mouflon; guinea pig; wolf; polecat; wildcat; Prussian carp; gibel carp; mulberry silk moth.

Ruling

- (1) Under the plenary power:
 - (a) it is hereby ruled that the name for each of the wild species listed in (2) and (3) below is not invalid by virtue of being pre-dated by a name based on a domestic form;
 - (b) the name *ferus* Falk, 1786, as published in the trinomen *Camelus dromedarius ferus*, and all uses of the name *Camelus ferus* prior to the publication of *Camelus ferus* Przewalski, 1878, is hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *africanus* Heuglin & Fitzinger, 1866, as published in the binomen *Equus africanus* (North African wild ass) (Mammalia);
 - (b) *ferus* Boddaert, 1785, as published in the binomen *Equus ferus* (Russian wild horse, tarpan) (Mammalia);
 - (c) *ferus* Przewalski, 1878, as published in the trinomen *Camelus bactrianus ferus* (wild Bactrian camel, now restricted to the western Gobi desert) (Mammalia);
 - (d) *guanicoe* Müller, 1776, as published in the binomen *Camelus guanicoe* (South American guanaco) (Mammalia);
 - (e) *vicugna* Molina, 1782, as published in the binomen *Camelus vicugna* (South American vicuña) (Mammalia);

- (f) *primigenius* Bojanus, 1827, as published in the binomen *Bos primigenius* (aurochs of Europe, Asia and North Africa, extinct since 1627) (Mammalia);
 - (g) *arnee* Kerr, 1792, as published in the binomen *Bos arnee* (Indian water buffalo, arni) (Mammalia);
 - (h) *mutus* Przewalski, 1883, as published in the binomen *Poephagus mutus* (Asian yak) (Mammalia);
 - (i) *aegagrus* Erxleben, 1777, as published in the binomen *Capra aegagrus* (bezoar of the Middle East) (Mammalia);
 - (j) *orientalis* Gmelin, 1774, as published in the binomen *Ovis orientalis* (mouflon of Western Asia) (Mammalia);
 - (k) *aperea* Erxleben, 1777, as published in the binomen *Cavia aperea* (South American cavy) (Mammalia);
 - (l) *lupus* Linnaeus, 1758, as published in the binomen *Canis lupus* (wolf of the Palaearctic, India and North America) (Mammalia);
 - (m) *gibelio* Bloch, 1782, as published in the binomen *Cyprinus gibelio* (Prussian or gibel carp of Central Europe to East Asia) (Osteichthyes);
 - (n) *mandarina* Moore, 1872, as published in the binomen *Theophila mandarina* (mulberry silk moth of China, Korea and Japan) (Lepidoptera).
- (3) To the entries for the following specific names on the Official List of Specific Names in Zoology is hereby added an endorsement to record the ruling in (1)(a) above:
- (a) *gaurus* H. Smith, 1827, as published in the binomen *Bos gaurus* (gaur of India, Burma and Malaya) (Mammalia);
 - (b) *putorius* Linnaeus, 1758, as published in the binomen *Mustela putorius* (polecat of Europe, Middle East and Morocco) (Mammalia);
 - (c) *silvestris* Schreber, 1777, as published in the trinomen *Felis catus silvestris* (wildcat of Western Europe to Western China and Central India, much of Africa) (Mammalia).
- (4) The name *ferus* Falk, 1786, as published in the trinomen *Camelus dromedarius ferus* (Mammalia) and as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3010

An application for the conservation of usage of the first available specific name based on a wild population for 15 wild species of mammals with domestic derivatives was received from Mrs Anthea Gentry (*Cuckfield, Haywards Heath, West Sussex, U.K.*), Dr Juliet Clutton-Brock (*Working Group on Nomenclature, International Council of Archaeozoology, clo The Natural History Museum, London, U.K.*) and Prof Colin P. Groves (*The Australian National University, Canberra, A.C.T., Australia*) on 14 December 1995. The case was published in BZN 53: 28–37 (March 1996). Notice of the case was sent to appropriate journals.

Comments in support of the application were published in the following issues of the *Bulletin of Zoological Nomenclature*:

BZN 53: 125 (June 1996).

BZN 53: 192–200 (September 1996). 18 comments, with a note of support from a further five authors.

BZN 53: 286–288 (December 1996). Four comments.

BZN 54: 119–123 (June 1997). Four comments.

BZN 54: 189 (September 1997).

BZN 55: 43–46 (March 1998).

BZN 55: 119–120 (June 1998).

BZN 56: 72–73 (March 1999). Two comments.

BZN 58: 231–233 (September 2001).

Four comments opposing the application were published in BZN 54: 123–127 (June 1997). A reply by the authors of the application was published at the same time. Further replies were included in comments by Dr I. Lehr Brisbin (*The University of Georgia, Aiken, South Carolina, U.S.A.*; BZN 55: 43–46, March 1998), Dr Christian R. Altaba (*Institut Mediterrani d'Estudis Avançats, Palma de Mallorca, Illes Balears, Spain*; BZN 55: 119–120, June 1998) and Prof Hans-Peter Uerpman (*Institut für Ur- und Frühgeschichte und Archäologie des Mittelalters, Tübingen, Germany*; BZN 58: 231–233, September 2001).

An opposing comment was also published in BZN 56: 280–282 (December 1999). Replies to this comment were published by Prof Uerpman and by the authors of the application in BZN 58: 231–234 (September 2001).

A statement of the intention and scope of the application was published by the authors of the case in BZN 59: 48–50 (March 2002).

In his supportive comment, published in BZN 53: 194 (September 1996), Dr Achilles Gautier (*Universiteit Gent, Gent, Belgium*) recommended that for consistency *Cyprinus* (currently *Carassius*) *gibelio* Bloch, 1782 and *Theophila* (currently *Bombyx*) *mandarina* Moore, 1872 should be placed on the Official List as the specific names for the wild species of Prussian or gibel carp and the mulberry silk moth respectively (para. 10 of the application). On the voting paper it was proposed that these names be added to the list of those in para. 11(2) of the application and they have been included in the current ruling.

Dr A.V. Abramov (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*), also commenting in support of the application (BZN 53: 287, December 1996), noted that the name *Camelus ferus* (published as *C. bactrianus ferus*) dates from Przewalski (1878), and not Przewalski (1883) as given in the application. He proposed that the earlier homonym *C. dromedarius ferus* Falk, 1786 be suppressed to conserve Przewalski's (1878) name. The date for *C. ferus* Przewalski was emended in para. 11(2)(c) of the application, and the additional proposals published in BZN 53: 287 were submitted for voting. Suppression of the name *C. dromedarius ferus* Falk, 1786 has been incorporated in the current ruling.

The specific names of *Felis silvestris* Schreber, 1777 and *Bos gaurus* H. Smith, 1827 were placed on the Official List in Opinions 465 (May 1957) and 1348 (September 1985) respectively. The specific name of *Mustela putorius* Linnaeus, 1758 (type species of *Putorius* Cuvier, 1816, placed on the Official List in Opinion 91, October 1926) was placed on the Official List in Direction 22 (November 1955).

The names listed in the ruling above, which are the first available names in use based on wild populations, apply to wild species and include those for their domestic derivatives if these are not distinguishable.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 53: 33 (with the emendment of the date of *Camelus bactrianus ferus* Przewalski to 1878), the proposals published in BZN 53: 287, and the addition of the specific names of *Cyprinus gibelio* Bloch, 1782 and *Theophila mandarina* Moore, 1872.

At the close of the voting period on 1 December 2002 the votes were as follows: 19 Commissioners voted FOR the proposals, 5 Commissioners voted AGAINST, Bouchet abstained, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on an Official List, on an Official Index, and the names on an Official List for which the entries are endorsed, by the ruling given in the present Opinion:

- aegagrus*, *Capra*, Erxleben, 1777, *Systema regni animalis* . . . Classis 1 (Mammalia), p. 260.
- africanus*, *Equus*, Heuglin & Fitzinger, 1866, *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe*, **54**: 588.
- aperea*, *Cavia*, Erxleben, 1777, *Systema regni animalis* . . . Classis 1 (Mammalia), p. 348.
- arnee*, *Bos*, Kerr, 1792, *The animal kingdom or zoological system of the celebrated Sir Charles Linnaeus*, vol. 1, part 1 (Mammalia), p. 336.
- ferus*, *Camelus bactrianus*, Przewalski, 1878, *From Kul'dzha through Tyan'-Shan' to Lob-Nor*, pp. 20, 43. [In Russian].
- ferus*, *Camelus dromedarius*, Falk, 1786, *Beiträge zur topographischen Kenntniss des Russischen Reiches*, vol. 3, p. 292.
- ferus*, *Equus*, Boddaert, 1785, *Elenchus Animalium*, vol. 1 (Sistens Quadrupedia), p. 159.
- gaurus*, *Bos*, H. Smith, 1827, The Ruminantia. Vol. 4 in Griffith, E., Smith, C.H. & Pidgeon, E. (Eds.), *The animal kingdom arranged in conformity with its organisation, by the Baron Cuvier, with additional descriptions of all the species hitherto named, and of many not before noticed*, p. 399.
- gibelio*, *Cyprinus*, Bloch, 1782, *Oeconomische Naturgeschichte der Fische Deutschlands*, vol. 1, p. 71.
- guanicoe*, *Camelus*, Müller, 1776, *Des Ritters Carl von Linné . . . voustandigen Natursystems. Supplements und Register*, p. 50.
- lupus*, *Canis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10; vol. 1, p. 39.
- mandarina*, *Theophila*, Moore, 1872, *Proceedings of the Zoological Society of London*, **1872**: 576.
- mutus*, *Poepagus*, Przewalski, 1883, *Third journey in Central Asia. From Zaisan through Khami into Tibet and to the sources of the Yellow River*, p. 191. [In Russian].
- orientalis*, *Ovis*, Gmelin, 1774, *Reise durch Russland zur Untersuchung der drey Natur-Reiche*, vol. 3, pp. 432, 486.
- primigenius*, *Bos*, Bojanus, 1827, *Nova Acta Physico-Medica Academiae Caesareae Leopoldino Carolinae*, **13**(2): 477.
- putorius*, *Mustela*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 46.
- silvestris*, *Felis catus*, Schreber, 1777, *Die Säugthiere in Abbildungen nach der Natur, mit Beschreibungen*, vol. 3, p. 39.
- vicugna*, *Camelus*, Molina, 1782, *Saggio sulle storia naturale del Chile*, p. 313.

OPINION 2028 (Case 3073)***Vespertilio pipistrellus* Schreber, 1774 and *V. pygmaeus* Leach, 1825
(currently *Pipistrellus pipistrellus* and *P. pygmaeus*; Mammalia,
Chiroptera): neotypes designated**

Abstract. The Commission has designated neotypes for two broadly sympatric species of pipistrelle bats, which until recently have been considered to be a single taxon under the name *Pipistrellus pipistrellus* (Schreber, 1774). The existence of two separate species was first detected from differences in the ultrasonic echolocation calls of the two species.

Keywords. Nomenclature; taxonomy; Mammalia; Chiroptera; bats; VESPERTILIONIDAE; *Pipistrellus*; *Pipistrellus pipistrellus*; *Pipistrellus pygmaeus*.

Ruling

- (1) Under the plenary power all previous fixations of type specimens for the following nominal species are hereby set aside:
 - (a) *Vespertilio pipistrellus* Schreber, 1774 and the adult male specimen no. BMNH 1997.81 from Beauvais Cathedral, Normandy, France, collected in October 1996, is designated as the neotype;
 - (b) *Vespertilio pygmaeus* Leach, 1825 and the adult female specimen no. BMNH 1999.43 from Chew Valley Lake, Bath and North East Somerset, U.K., collected in October 1998, is designated as the neotype.
- (2) The name *Pipistrellus* Kaup, 1829 (gender: masculine), type species by monotypy *Vespertilio pipistrellus* Schreber, 1774, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *pipistrellus* Schreber, 1774, as published in the binomen *Vespertilio pipistrellus* and as defined by the neotype designated in (1)(a) above (specific name of the type species of *Pipistrellus* Kaup, 1829);
 - (b) *pygmaeus* Leach, 1825, as published in the binomen *Vespertilio pygmaeus* and as defined by the neotype designated in (1)(b) above.

History of Case 3073

An application for the designation of neotypes for *Vespertilio pipistrellus* Schreber, 1774 and *V. pygmaeus* Leach, 1825 was received from Prof Gareth Jones (*University of Bristol, Bristol, U.K.*) and Dr Elizabeth M. Barratt (*Institute of Zoology, Zoological Society of London, London, U.K.*) on 21 October 1997. After correspondence the case was published in *BZN* 56: 182–186 (September 1999). Notice of the case was sent to appropriate journals.

The application sought to establish names for two reproductively isolated cryptic species of pipistrelle bats which until 1993 were considered to be a single taxon under the name *Pipistrellus pipistrellus* (Schreber, 1774). The species are distinguished by

the frequency of their ultrasonic echolocation calls and other features (para. 4 of the application). It was proposed that the much used name *P. pipistrellus* be retained for the species with the lower frequency call (45 kHz) and that the oldest available synonym, *P. pygmaeus* (Leach, 1825), be adopted for the species with the higher frequency call (55 kHz).

The intention of the application was to stabilise both *P. pipistrellus* and *P. pygmaeus* by the designation of neotypes that are in accord with the current usage of the names (i.e. for taxa distinguished by their phonic calls), and the application was submitted to the Commission for a ruling under Article 75.6 of the Code.

Some of those who commented on the case welcomed the use of the name *P. pipistrellus* for the 45 kHz phonic type but favoured the adoption of *P. mediterraneus* Cabrera, 1904, rather than *P. pygmaeus*, for the 55 kHz phonic type. As noted in a number of comments, *P. mediterraneus* was not the earliest available name after *P. pygmaeus*; it is, in fact, 91 years junior to *pygmaeus* and one of the most recent names. There are 15 available synonyms between *P. pygmaeus* and *P. mediterraneus* and it is not known to which phonic type or types any of the names applies. If adopted, *P. mediterraneus* could potentially have been displaced by one of the intermediate synonyms.

Five comments in support of the application were published in BZN 57: 49–50 (March 2000), together with a comment opposing the use of the name *P. pygmaeus* for the 55 kHz phonic type.

A comment by Drs Otto von Helversen and Frieder Meyer (*Universität Erlangen, Erlangen, Germany*) and Dr Dieter Kock (*Forschungsinstitut Senckenberg, Frankfurt am Main, Germany*), published in BZN 57: 113–115 (June 2000), supported the use of *P. pipistrellus* and the designation of a neotype for the 45 kHz calling species, but proposed the adoption of *P. mediterraneus* rather than *P. pygmaeus* for the second species. A comment in support of the application, and another from one of the authors of the application, Prof Gareth Jones, were published at the same time.

A reply to Helversen et al. by Prof Gareth Jones was published in BZN 58: 60–61 (March 2001).

A comment from Dr Victor Van Cakenberghe (*Universiteit Antwerpen, Antwerp, Belgium*), published in BZN 58: 230–231 (September 2001), supported the designation of a neotype for *P. pipistrellus* but favoured the use of *P. mediterraneus* rather than *P. pygmaeus*. A reply to this comment by Prof Gareth Jones was published in BZN 58: 309 (December 2001).

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 56: 185.

At the close of the voting period on 1 December 2002 the votes were as follows: 24 Commissioners voted FOR the proposals, 1 Commissioner voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Voting for, Cogger commented: 'While some proponents for and against the selection of *Pipistrellus pygmaeus* as the name for the second cryptic species have exaggerated the strength of their cases and/or the weakness of the opposing arguments, there is clearly an element of personal preference for a name rather than for the most stable nomenclatural outcome. I agree with the applicants that their

proposed solution is likely to result in the greatest stability and least confusion'. Voting against, Alonso-Zarazaga commented: 'I am fully in favour of adopting the name *P. mediterraneus* for the 55 kHz phonic type and, if necessary, setting aside any possible prior synonyms. The adoption of *P. pygmaeus* for this taxon seems unjustified to me'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- Pipistrellus* Kaup, 1829, *Skizzirte Entwicklungs-Geschichte und Natürliches System der Europäischen Thierwelt . . . Erster Theil (welcher die Vogelsäugethiere und Vögel, nebst Andeutung der Entstehung der letzteren aus Amphibien enthält)*, pp. 98, 188.
- pipistrellus, Vespertilio*, Schreber, 1774, *Die Säugthiere in Abbildungen nach der Natur mit Beschreibungen*, vol. 1, p. 167.
- pygmaeus, Vespertilio*, Leach, 1825, *Zoological Journal*, 1(4): 559.

OPINION 2029 (Case 3020)***Megalotragus* Van Hoepen, 1932 (Mammalia, Artiodactyla): conserved, and *Alcelaphus kattwinkeli* Schwarz, 1932 (currently *Megalotragus kattwinkeli*): specific name conserved**

Abstract. The Commission has ruled that the generic name *Megalotragus* Van Hoepen, 1932 and the specific name *M. kattwinkeli* (Schwarz, 1932) are conserved. The generic name has been used consistently for a genus of very large African fossil antelopes (family BOVIDAE), dating from the Pliocene-late Pleistocene. The specific name *M. kattwinkeli* refers to an East African species of the genus. The names were threatened by *Rhynotragus* Reck, 1925, which had been used only once in 1997, and *R. semiticus* Reck, 1925, which had remained unused, and these have been suppressed except for homonymy.

Keywords. Nomenclature; taxonomy; Mammalia; Artiodactyla; BOVIDAE; ALCELA-PHINI; antelopes; Pliocene; Pleistocene; Africa; *Megalotragus*; *Megalotragus priscus*; *Megalotragus kattwinkeli*.

Ruling

- (1) Under the plenary power the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) the generic name *Rhynotragus* Reck, 1925;
 - (b) the specific name *semiticus* Reck, 1925, as published in the binomen *Rhynotragus semiticus*.
- (2) The name *Megalotragus* Van Hoepen, 1932 (gender: masculine), type species by monotypy *Megalotragus eucornutus* Van Hoepen, 1932 (a junior subjective synonym of *Bubalis priscus* Broom, 1909), is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *kattwinkeli* Schwarz, 1932, as published in the binomen *Alcelaphus kattwinkeli* and as defined by the holotype, specimen no. VI-1099 in the Bayerischen Staatssammlung für Paläontologie und historische Geologie in Munich;
 - (b) *priscus* Broom, 1909, as published in the binomen *Bubalis priscus* (senior subjective synonym of *Megalotragus eucornutus* Van Hoepen, 1932, the type species of *Megalotragus* Van Hoepen, 1932).
- (4) The name *Rhynotragus* Reck, 1925 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology, as suppressed in (1)(a) above.
- (5) The name *semiticus* Reck, 1925, as published in the binomen *Rhynotragus semiticus* and as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3020

An application for the conservation of the name *Megalotragus* Van Hoepen, 1932 and of the specific name of *Alcelaphus kattwinkeli* Schwarz, 1932 was received from Dr A.W. Gentry (*The Natural History Museum, London, U.K.*) and Mrs Anthea Gentry (*Cuckfield, Haywards Heath, West Sussex, U.K.*) on 15 May 1996. The case was published in BZN **56**: 42–47 (March 1999). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that there was a prima facie case for the conservation of the names *Megalotragus* and *A. kattwinkeli* under Article 23.9.3 of the Code (para. 5 of the application). The application was supported by Vrba (1997; para. 5 of the application) and by Dr John M. Harris (*Los Angeles County Museum of Natural History, Los Angeles, California, U.S.A.*) who noted (in litt. to A.W. Gentry, May 1995): 'I have seen a copy of the manuscript on the rediscovery of some Olduvai bovid types [published by Gentry, Gentry & Mayr, December 1995]. I heartedly endorse your decision to have *Rhynotragus* set aside'. The name *Rhynotragus* has not been used in place of *Megalotragus* before or since a single use in 1997.

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN **56**: 45.

At the close of the voting period on 1 December 2002 the votes were as follows: 25 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

kattwinkeli, *Alcelaphus*, Schwarz, 1932, *Zentralblatt für Mineralogie, Geologie und Paläontologie*, (B)**1932**(1): 4.

Megalotragus Van Hoepen, 1932, *Paleontologiese Navorsing van die Nasionale Museum, Bloemfontein*, **2**(5): 63.

priscus, *Bubalis*, Broom, 1909, *Annals of the South African Museum*, **7**: 279.

Rhynotragus Reck, 1925, *Illustrierte Zeitung*, Leipzig, **164**: 451.

semiticus, *Rhynotragus*, Reck, 1925, *Illustrierte Zeitung*, Leipzig, **164**: 451.

OPINION 2030 (Case 3178)***Hippotragus* Sundevall, 1845 (Mammalia, Artiodactyla): conserved**

Abstract. The Commission has ruled that the generic name *Hippotragus* Sundevall, 1845 for the African roan, sable and blaauwbok antelopes and a number of Pliocene and Pleistocene African and southern Asian fossil species is conserved. This ruling, which stabilises the nomenclature of hippotragine antelopes at the family-group, generic and specific levels, rescinds rulings made by the Commission in 1929 and 1955 in which *Hippotragus* was accepted as available from Sundevall's later publication (1846).

Keywords. Nomenclature; taxonomy; Mammalia; Artiodactyla; HIPPOTRAGINAE; *Hippotragus*; *Hippotragus equinus*; *Hippotragus niger*; *Hippotragus leucophaeus*; antelopes; roan; sable; blaauwbok; Recent; Pliocene; Pleistocene; Asia; Africa.

Ruling

- (1) Under the plenary power:
 - (a) the suppression of the generic name *Hippotragus* Sundevall, 1845 in Direction 23 is hereby rescinded;
 - (b) the entry for *Hippotragus* Sundevall, 1845 is hereby deleted from the Official Index of Rejected and Invalid Generic Names in Zoology and the name *Hippotragus* Sundevall, 1845 (gender: masculine), type species by monotypy *Antilope equina* É. Geoffroy Saint-Hilaire, 1803, is placed on the Official List of Generic Names in Zoology;
 - (c) the entry for *Hippotragus* Sundevall, 1846 is hereby deleted from the Official List of Generic Names in Zoology;
 - (d) the entries for the following names on the Official List of Specific Names in Zoology are hereby emended:
 - (i) *equina*, as published in the binomen *Antilope equina*, to record the authorship and date as É. Geoffroy Saint-Hilaire (1803) and to add an endorsement that it is the specific name of the type species of *Hippotragus* Sundevall, 1845;
 - (ii) *niger* Harris, 1838, as published in the binomen *Aigocerus niger*, to record the date and place of publication as 27 January 1838, *The Athenaeum*, **535**: 71;
 - (e) the entry on the Official List of Specific Names in Zoology for *leucophaea* Pallas, 1766, as published in the binomen *Antilope leucophaea*, is hereby emended to record deletion of the statement that it is the type species of *Hippotragus* Sundevall, 1846, and addition of an endorsement that it is defined by the lectotype designated by Husson & Holthuis (1969).
- (2) The name HIPPOTRAGINAE Sundevall, 1845 (type genus *Hippotragus* Sundevall, 1845) is hereby placed on the Official List of Family-Group Names in Zoology.

History of Case 3178

An application to conserve the name *Hippotragus* Sundevall, 1845, and thereby to stabilise the nomenclature of hippotragine antelopes at the species, genus and family-group levels, was received from Dr Peter Grubb (London, U.K.) on 10 October 2000. After correspondence the case was published in BZN 58: 126–132 (June 2001). Notice of the case was sent to appropriate journals. No comments on this case were received.

The name *Hippotragus* Sundevall, 1846, with the type species designated as *Antilope leucophaea* Pallas, 1766, was placed on the Official List in Opinion 109 (June 1929). However, the earlier publication of *Hippotragus* by Sundevall (1845) and the type species by monotypy *Antilope equina* É. Geoffroy Saint-Hilaire, 1803 were then overlooked. Opinion 109 was endorsed by the suppression of *Hippotragus* Sundevall, 1845 in Direction 23 (November 1955) and *A. leucophaea* was placed on the Official List in Direction 22 (November 1955). The current ruling rescinds Direction 23 and emends Direction 22 under Article 80.9 of the Code.

The *Catalogue des mammifères du Muséum National d'Histoire Naturelle* by Étienne Geoffroy Saint-Hilaire (1803) was confirmed by the Commission as available for nomenclatural purposes and placed on the Official List of Works Approved as Available for Zoological Nomenclature in Opinion 2005 (June 2002). The authorship and date of the specific name of *Antilope equina*, which was established in the work, were therefore correctly attributed to É. Geoffroy Saint-Hilaire (1803) (paras. 9, 11(1)(b) and 11(1)(d)(i) of the application).

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 129–130.

At the close of the voting period on 1 December 2002 the votes were as follows: 25 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists, and to the names on Official Lists for which the entries are emended, by the ruling given in the present Opinion:

equina, *Antilope*, É. Geoffroy Saint-Hilaire, 1803, *Catalogue des mammifères du Muséum National d'Histoire Naturelle*, p. 259.

Hippotragus Sundevall, 1845, *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar, Andra Årgången*, 1845(2, 3): 31.

Hippotragus Sundevall, 1846, *Kongliga Vetenskaps-Akademiens Handlingar*, 1846: 196.

HIPPOTRAGINAE Sundevall, 1845, *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar, Andra Årgången*, 1845(2, 3): 31.

leucophaea, *Antilope*, Pallas, 1766, *Miscellanea Zoologica*, p. 4.

niger, *Aigocerus*, Harris, 1838 (27 January), *The Athenaeum*, 535: 71.

The following is the reference for the designation of the lectotype of *Antilope leucophaea* Pallas, 1766:

Husson, A.M. & Holthuis, L.B. 1969. *Zoologische Mededelingen*, 49: 153.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described . . .'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in BZN 59: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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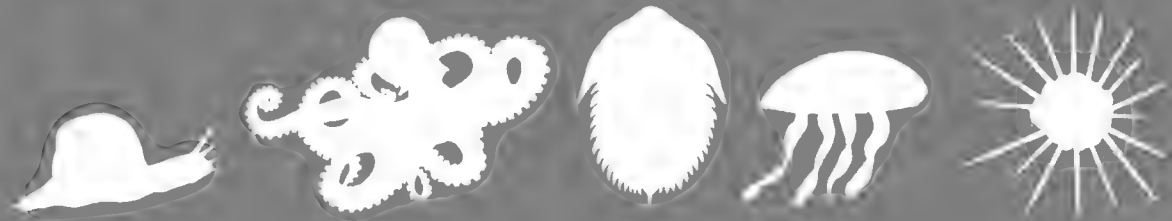
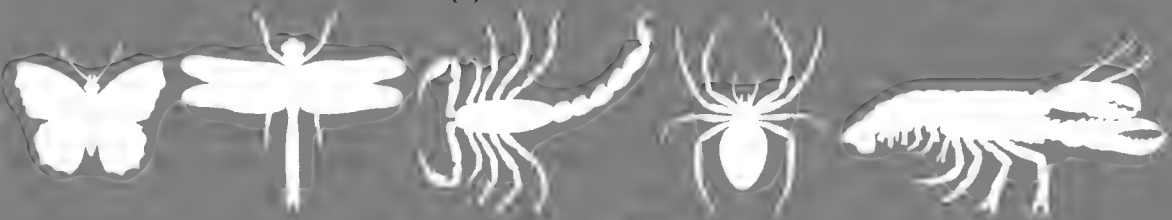
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The
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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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30 June 2003

Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to iczn@nhm.ac.uk where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see **BZN 59**: 234).

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 60, part 1, 31 March 2003) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3264: STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera): proposed conservation of ten specific names. Author: L.H. Herman (U.S.A.).

CASE 3265: *Lathrobium geminum* Kraatz, 1857 (Insecta, Coleoptera): proposed conservation of the specific name. Author: L.H. Herman (U.S.A.).

CASE 3266: *Palaeortyx phasianoides* Milne-Edwards, 1869 (Aves, Galliformes): proposed conservation of the usage of the specific name by designation of a neotype. Authors: U.B. Göhlich & C. Mourer-Chauviré (Germany & France).

CASE 3267: *Cherax tenuimanus* Smith, 1912 and *C. cainii* Austin, 2002 (Crustacea, Decapoda): proposed conservation of usage of *C. tenuimanus* by designation of neotypes for both *C. tenuimanus* and *C. cainii*. Authors: B.W. Molony, B. Jones, C.S. Lawrence & V.A. Gouteff (Australia).

CASE 3268: *Conidophrys* Chatton & Lwoff, 1934 (Ciliophora, Pilisuctorida): proposed conservation. Author: I.V. Dovgal (Ukraine).

CASE 3269: *Rhamphomyia* (*Rhamphomyia*) Meigen, 1822 and *Rhamphomyia* (*Pararhamphomyia*) Frey, 1922 (Insecta, Diptera): proposed conservation of the usage of the subgeneric names by designation of a type species for *Rhamphomyia* (*Rhamphomyia*). Authors: M. Barták & B.J. Sinclair (Czech Republic & Germany).

CASE 3270: ISOMETRINAE Clark, 1917 (Echinodermata, Crinoidea): proposed emendation of spelling to ISOMETRAINAE to remove the homonymy with ISOMETRINAE Kraepelin, 1891 (Arachnida, Scorpiones). Authors: V. Fet & C. Messing (U.S.A.).

CASE 3271: *Nematois australis* Heydenreich, 1851 (currently *Adela australis*; Insecta, Lepidoptera): proposed conservation of the specific name. Authors: M.V. Kozlov & E.J. van Nieuwerkerken (Finland & The Netherlands).

CASE 3272: *Microsaurus* Dejean, 1833 (Insecta, Coleoptera): proposed conservation of the usage by designation of *Staphylinus ochripennis* Ménériés, 1832 as the type species. Author: A. Smetana (Canada).

CASE 3273: *Genetta rubiginosa* Pucheran, 1855 (Mammalia, Carnivora): proposed conservation of the usage of the specific name by designation of a neotype. Author: P. Grubb (U.K.).

CASE 3274: *Hydroporus foveolatus* Heer, 1839 (Insecta, Coleoptera): proposed precedence of the specific name over *Hydroporus nivalis* Heer, 1839. Authors: H.V. Shaverdo & M.A. Jäch (Canada & Austria).

CASE 3275: *Metromenus* Sharp, 1884 (Insecta, Coleoptera): proposed conservation of the usage by designation of a type species. Authors: J.K. Liebherr, G.M. Nishida & E.C. Zimmerman (U.S.A. & Australia).

CASE 3276: *Primnoa regularis* Duchassaing & Michelotti, 1860 (currently *Narella regularis*; Coelenterata, Octocorallia): proposed conservation of the usage by designation of a neotype. Author: S. Cairns & F.M. Bayer (U.S.A.).

CASE 3277: *Chitra chitra* Nutaphand, 1986 (Reptilia, Testudines): proposed precedence of the specific name over that of *Chitra selenkae* Jaekel, 1911. Authors: W. McCord & P. Pritchard (U.S.A.).

The International Commission on Zoological Nomenclature

The aim of the Commission is to bring stability to the use of animal names (zoological nomenclature). The Commission does this by:

(a) producing, publishing and periodically revising the *International Code of Zoological Nomenclature* (the Code), which deals with the formulation and use of animal names;

(b) considering and ruling on specific cases of nomenclatural uncertainty and dispute about animal names that are not automatically resolved under the provisions of the Code, via applications published in the *Bulletin of Zoological Nomenclature*.

The International Congress of Zoology founded the Commission in 1895. At present, the Commission consists of 25 zoologists from 20 countries whose interests cover most of the main divisions, including fossil animals (palaeontology), of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS). Commission members are elected by the vote of zoologists attending General Assemblies of the IUBS or other appropriate congresses. Nominations for membership may be sent to the Executive Secretary at any time. The Commission's history is described in *Towards Stability in the Names of Animals* (1995). See below under 'Publications' for details. Further discussion of the Commission's activities can be found in BZN 48: 295–299 (December 1991) and BZN 60: supplement pp. 1–12 (March 2003).

The International Trust for Zoological Nomenclature

The International Trust for Zoological Nomenclature (the Trust) was founded to manage the Commission's financial matters in 1947. It is a registered charity, based in the U.K. (No. 211944). At present, the Trust consists of 30 members from 14 countries. Discussion of the Trust's activities can be found in BZN 60: supplement pp. 1–12 (March 2003).

The International Code of Zoological Nomenclature

The aim of the Code is to provide the greatest universality and continuity in the scientific names of animals without restricting the taxonomy or classification of the animals for which the names are used. The current (fourth edition) of the Code was published by the Trust in 1999, and came into effect on 1 January 2000. This edition supersedes all previous editions and official texts are available in English, Chinese (traditional), French, German, Japanese, Russian, Spanish and Ukrainian. Other translations (including Czech and Catalan) are in preparation. See below under 'Publications' for sales details.

The Articles of the Code enable the user to decide the valid name for any animal taxon between and including subspecies and superfamily. The provisions of the Code can be waived or modified in particular cases where strict adherence would cause confusion. However, only the Commission, acting on behalf of all zoologists, can do this in response to formal applications that are published in the *Bulletin*.

The Bulletin of Zoological Nomenclature

The *Bulletin* is published four times each year. The *Bulletin* includes applications relating to animal names, comments on applications and the Commission's eventual rulings based on the Commissioners' votes (these are referred to as Opinions). Each Opinion published in the *Bulletin* is an official ruling of the Commission and comes

into effect on the day of publication of the *Bulletin*. The Opinions are summarised in the *Official Lists and Indexes of Names and Works in Zoology*. The *Bulletin* also includes discussion papers on proposed emendations to the Code. See below under 'Publications' for how to subscribe to the *Bulletin* and for details about the *Official Lists and Indexes of Names and Works in Zoology*.

The Commission's website

Abstracts of applications and Opinions, and a record of the names included in the *Official Lists and Indexes of Names and Works in Zoology*, are posted on the Commission's website (www.iczn.org). It is planned for this website to be extensively revised in the near future.

Publications

All publications listed below may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk). With the exception of the *Bulletin* (which can only be ordered from ITZN), these publications can also be ordered from the American Association for Zoological Nomenclature (AAZN), Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: smith.davidg@nmnh.si.edu). Prices listed below include surface postage. Please add £2 or \$3 if you require postage by Airmail. Please send payment with orders. Cheques should be made out to 'ITZN' (in sterling or dollars) or to 'AAZN' (in dollars only). Visa or MasterCard payments can be made to ITZN (but not AAZN). Please give cardholder's name, address, card number and card expiry date when ordering.

The *Bulletin* subscription for 2003 is £123 or US\$220, including postage by accelerated surface post. Individual subscribers for personal use have a 50% discount making the subscription £61 or US\$110. You are now able to complete your collection of *Bulletins* at bargain prices since there are large discounts on both single volumes and complete sets of the BZN. This applies also to the *Opinions and Declarations* (1943-1959), which were published concurrently with volumes 1-16 of the BZN. A price list is available on application.

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The *Official Lists and Indexes of Names and Works in Zoology* gives details of all the names and publications on which the Commission has ruled since it was set up in 1895. The first volume published in 1987 contains 9917 entries, and a Supplement (2001) lists an additional 2385 entries. The cost of the 1987 volume and of the Supplement is £60 or US\$110 each, with reductions for both volumes ordered together and for individual buyers for personal use. Details available on request.

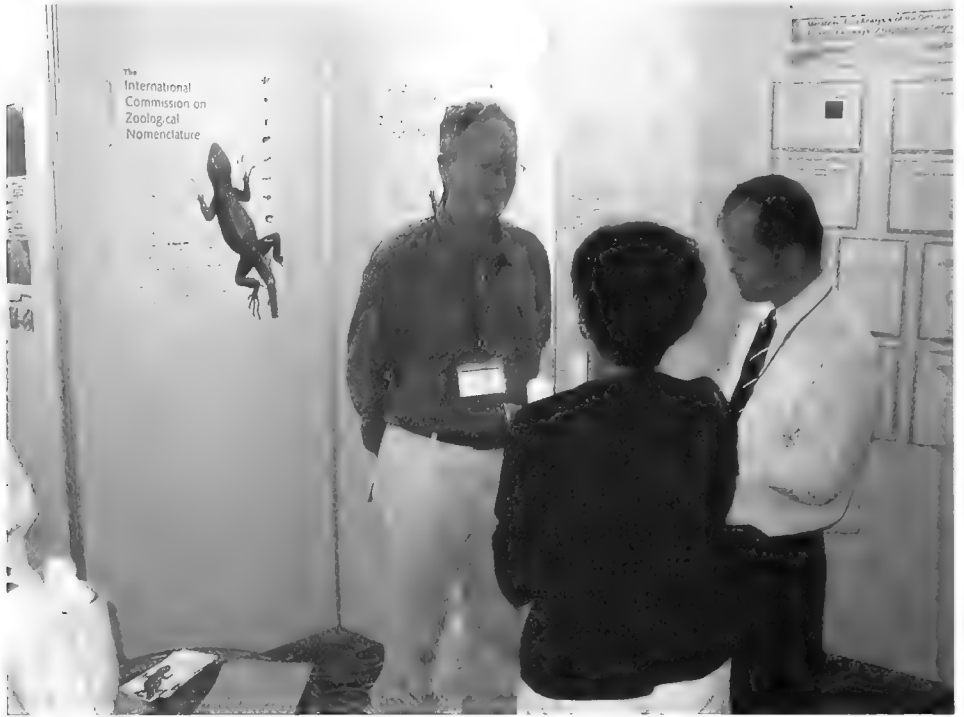
Towards Stability in the Names of Animals – a History of the International Commission on Zoological Nomenclature 1895–1995 was published in 1995 in recognition of ICZN's Centenary. This book (104 pages) contains 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the development of animal nomenclature. The cost is £30 or US\$50.

Funding appeal

The Convention on Biological Diversity was adopted in Rio (1992) and its objectives were reinforced in Johannesburg (2002). As a result, international, regional, and local governments now recognise the need to underpin their sustainability policies with inventories of current biological diversity. About 2 million of the earth's living-organisms have been formally named since the time of Linnaeus. By the best estimates, over 13 million others remain to be described and named. This massive task will rely on expanded IT capabilities, and the development of new IT-based systems and procedures.

The Commission will be a key player in these initiatives. With the new urgency to identify and catalogue life on earth, the Commission's continuing task will be to provide the secure animal naming system that underpins zoological taxonomy, biodiversity science, and all other applications of zoological taxonomy. The Commission must now invest in skilled staff and the necessary computer equipment to fulfil its unique responsibilities and keep pace with emerging IT-based identification and naming practices.

The Trust seeks to establish an endowment fund to provide lasting financial security for the Commission's vital work. The appeal was formally launched at the 20th Pacific Science Congress in Bangkok, 17–21 March 2003. The appeal is now being extended worldwide. Accompanying the March 2003 issue of the *Bulletin* was a supplement (BZN 60: supplement pp. 1–12; March 2003) and a leaflet outlining the background to and aims of the appeal. Further copies of both documents are available from the Executive Secretary. The Trust urges all those with the necessary resources to assist in the establishment of an endowment fund that will ensure the continuation and development of the Commission's essential work. All levels of support are greatly appreciated and make an impact.



The Earl of Cranbrook (Chairman of the International Trust for Zoological Nomenclature) discusses the work of the Commission with two delegates at the 20th Pacific Science Congress in Bangkok, March 2003.
(Picture by Neal Evenhuis)

Case 3211

CLIONIDAE d'Orbigny, 1851 (Porifera, Hadromerida): proposed emendment of spelling to CLIONAIDAE to remove homonymy with CLIONIDAE Rafinesque, 1815 (Mollusca, Pteropoda)

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Abstract. The purpose of this application, under Articles 29 and 55.3.1 of the Code, is to remove homonymy between the family names CLIONIDAE Rafinesque, 1815 (Mollusca) and CLIONIDAE d'Orbigny, 1851 (Porifera) by changing the spelling of the junior homonym. It is proposed that the entire name *Cliona* Grant, 1826 (Porifera) be used to form CLIONAIDAE, leaving the stem of the senior homonym (based on the name *Clione* Pallas, 1774; Mollusca) unchanged. *Clione* Pallas, 1774 and *Clio* Linnaeus, 1767 are respectively the type genera of CLIONIDAE Rafinesque, 1815 (Mollusca) and CLIOIDAE Jeffreys, 1869 (Mollusca).

Keywords. Nomenclature; taxonomy; CLIOIDAE; CLIONAIDAE; CLIONIDAE; *Clio*; *Cliona*; *Clione*; *Clio pyramidata*; *Cliona celata*; *Clione borealis*; pteropods; boring sponges.

1. Rafinesque (1815, p. 141) established a subfamily for a group of gymnosome pteropods (Mollusca) and named it 'Clionidia'. Under Article 29.2 of the Code, this name has an incorrect suffix for a subfamily. The suffix should be -INAE, giving CLIONINAE. The type genus was given by Rafinesque as 'Clione R. Clio Brown' [sic], and the context indicates that *Clione* Pallas, 1774 was meant. The type species of *Clione* by monotypy is *Clione borealis* Pallas, 1774 (p. 28, pl.1, figs. 18-19). *C. borealis* is a junior synonym of *Clio limacina* Phipps, 1774 (p. 195). The respective months of publication of the works by Pallas (1774) and Phipps (1774) are being investigated and will be made available to the Commission before it votes on this application.

2. The genus *Clio* was described and named by Linnaeus, 1767 (p. 1094), based on a pre-Linnaean work, *The civil and natural history of Jamaica*, by Patrick Browne (1756). Linnaeus (1767) included three nominal species: *C. caudata*, *C. pyramidata* and *C. retusa*. He referred to descriptions of these made by Browne (1756). Phipps (1774, p. 195) then added two additional nominal species *C. helicina* and *C. limacina* (see above), referring to the rare English translation of Martens's (1675) pre-Linnaean work *Spitzbergische oder Groenlandische Reise Beschreibung*.

3. The type species of *Clio* is *Clio pyramidata* Linnaeus, 1767 by subsequent designation by Gray (1847, p. 203). *Clio* Linnaeus, 1767 is the type genus of the family CLIOIDAE Jeffreys, 1869 (p. 118). The similarity of the names *Clio* Linnaeus,

1767 and *Clione* Pallas, 1774 has meant that usage of these names has been confused. It was not until after the 1840s that *Clio* was generally used for a group of thecosome molluscs and *Clione* became generally used as the name for a group of gymnosome molluscs (e.g. Gray, 1847).

4. The standard modern reference on the Gymnosomata is by van der Spoel (1976, pp. 97–103), who incorrectly gives Gray (1840) as the author of the family name CLIONIDAE and Pruvot-Fol (1926) as the author of the subfamily name CLIONINAE. Under Articles 11.7.1.3, 34.1 and 36.1 of the Code, both the names CLIONINAE and CLIONIDAE used in relation to gymnosome pteropods retain Rafinesque, 1815 as correct authorship and date.

5. D'Orbigny (1851, p. 209) established the family name CLIONIDAE for a group of boring sponges (hadromeridan Porifera) designating *Cliona* Grant, 1826 (p. 78) as the type genus. The type species of *Cliona* by monotypy is *Cliona celata* Grant, 1826 (p. 78). In the last 100 years, numerous publications have used the family name CLIONIDAE d'Orbigny, 1851. Examples include Annandale (1915, p. 1), de Laubenfels (1936, p. 154), Volz (1939), Old (1941), Hartman (1958), and more recently Pang (1973), Rützler (1986), Vicente et al. (1991), Bavastrello et al. (1996), Hooper & Wiedenmayer (1994) and Rosell & Uriz (1997). All modern textbooks and reviews of systematics, ecology, and biology of sponges (Porifera) use the name CLIONIDAE, although (if it is given) authorship is always incorrectly attributed to Gray, 1867 (e.g. Brien et al. (1973), Bergquist (1978) and Hartman (1982)).

6. CLIONIDAE d'Orbigny, 1851 is a junior homonym of CLIONIDAE Rafinesque, 1815, and has no synonym that could be used as a replacement name. We propose to remove this homonymy by using the entire genus name *Cliona* as the stem for the formation of the sponge (poriferan) family name.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that for the purposes of Article 29 of the Code the stem of the generic name *Cliona* Grant, 1826 is *Cliona*-;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Clio* Linnaeus, 1767, type species by subsequent designation by Gray (1847) *Clio pyramidata* Linnaeus, 1767 (Mollusca);
 - (b) *Clione* Pallas, 1774, type species by monotypy *Clione borealis* Pallas, 1774 (Mollusca);
 - (c) *Cliona* Grant, 1826, type species by monotypy *Cliona celata* Grant, 1826 (Porifera);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *pyramidata* Linnaeus, 1767, as published in the binomen *Clio pyramidata* (the specific name of the type species of *Clio* Linnaeus, 1767) (Mollusca);
 - (b) *limacina* Phipps, 1774, as published in the binomen *Clio limacina* (senior synonym of *Clione borealis* Pallas, 1774, the specific name of the type species of *Clione* Pallas, 1774) (Mollusca);
 - (c) *celata* Grant, 1826, as published in the binomen *Cliona celata* (the specific name of the type species of *Cliona* Grant, 1826) (Porifera);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) CLIONIDAE Rafinesque, 1815, type genus *Clione* Pallas, 1774 (Mollusca);

- (b) CLIONAIDAE d'Orbigny, 1851, type genus *Cliona* Grant, 1826 (spelling emended by the ruling in (1) above) (Porifera);
- (c) CLIOIDAE Jeffreys, 1869, type genus *Clio* Linnaeus, 1767 (Mollusca);
- (5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name CLIONIDAE d'Orbigny, 1851 (an incorrect original spelling of CLIONAIDAE, as ruled in (1) above) (Porifera).

Acknowledgements

We thank Jean-Paul Rocroi, Anders Warén and John Taylor for helping us in preparing this application.

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Acknowledgement of receipt of this application was published in BZN **58**: 162.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3249

Lithasia Haldeman, 1840 (Mollusca, Gastropoda): proposed conservation

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the name *Lithasia* Haldeman, 1840 for a genus of freshwater prosobranch gastropods (family PLEUROCERIDAE) from the eastern United States. This name is already on the Official List of Generic Names in Zoology and has been in continuous use for over 140 years. However, it is threatened by a senior subjective synonym *Ellipstoma* Rafinesque, 1818. The name *Ellipstoma* has had little usage, and then mainly in lists. The names of its included species have never been adopted and suppression of the name *Ellipstoma* is proposed.

Keywords. Nomenclature; taxonomy; Gastropoda; PLEUROCERIDAE; freshwater prosobranch gastropods; *Lithasia*; *Lithasia geniculata*; eastern United States.

Application to the Commission

1. Rafinesque (1818b, p. 42) briefly described a new genus *Ellipstoma* and included three new nominal species: *E. gibbosa*, *E. rugosa* and *E. zonalisa*. Hannibal (1912, p. 168) subsequently designated *E. gibbosa* as the type species of *Ellipstoma*. Morrison (1954, p. 363) claimed that Hannibal had misidentified the type species. In addition, Burch (1979, p. 98) stated that 'the identity of *Ellipstoma gibbosa* Rafinesque, 1818 is too doubtful to give nomenclatural validity to *Ellipstoma* Rafinesque, 1818'. The name *Ellipstoma* has had little usage, and then mainly in lists. The names of its included species have never been adopted and *Ellipstoma* does not appear in the online version of *Zoological Record* (1978–2001) or *GeoRef* (1758–2001).

2. Agassiz (1846a, p. 33) misspelled the name as *Ellipsostoma* and attributed it to Rafinesque, 1819 and later (Agassiz, 1846b, p. 136) listed this misspelling. Millard (1997, p. 86; 2001, p. 422) misspelled the genus as *Ellipsoma*.

3. Haldeman (1840, p. 1) described the genus *Lithasia*, and included one new species, *L. geniculata*, the type species of the genus by monotypy. The name *Lithasia* is already on the Official List of Generic Names in Zoology (see Opinion 1195; BZN 38: 259–265, November 1991). In addition, it has been used extensively in studies of the North American gastropod fauna (e.g. Walker, 1918; Morrison, 1940; Goodrich,

1941; Clench, 1965; Burch, 1979; Ahlstedt, 1980; Bogan & Parmalee, 1983; Clarke, 1983; Bogan et al., 1995; Holznagel & Lydeard, 2000; Minton, 2002). The Commission Secretariat holds an additional 33 usage references.

4. Morrison (1954, p. 363) considered *Ellipstoma gibbosa* (the type species of *Ellipstoma* Rafinesque, 1818) to be a senior subjective synonym of both *Melania armigera* Say, 1821 (currently *Lithasia armigera*) and *L. geniculata* (the type species of *Lithasia* Haldeman, 1840). This synonymy means that *Ellipstoma* is a senior subjective synonym of *Lithasia*.

5. In order to avoid undesirable changes in nomenclature and to preserve the stability of generic names in the family PLEUROCERIDAE, we propose that the widely used name *Lithasia* Haldeman, 1840 be conserved under Article 23.9.3 by the suppression of its senior subjective synonym *Ellipstoma* Rafinesque, 1818. *Lithasia* has had considerable usage (see para. 3 above), but *Ellipstoma* has had limited usage in the last 100 years (see para. 1 above) preventing automatic conservation of *Lithasia* under Article 23.9.1.1. *Lithasia* and its type species *L. geniculata* are already on the Official Lists (Opinion 1195; see para. 3 above).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Ellipstoma* Rafinesque, 1818 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Ellipstoma* Rafinesque, 1818, as suppressed in (1) above;
 - (b) *Ellipsostoma* Agassiz, 1846 (an incorrect subsequent spelling of *Ellipstoma* Rafinesque, 1818);
 - (c) *Ellipsoma* Millard, 1997 (an incorrect subsequent spelling of *Ellipstoma* Rafinesque, 1818).

Supporting information

1. In 1818, Rafinesque indicated that *Ellipstoma* included four species, but did not list them (Rafinesque, 1818c, p. 107). The following year (1819, p. 424) he listed *E. gibbosa*, emended *E. zonalisa* to *E. zonalis*, and added two more nominal species to *Ellipstoma*: *E. marginula* and *E. vittata* (these are nomina nuda).

2. Haldeman (1841, p. 1) described the genus *Angitrema*, with *Melania armigera* Say, 1821 as the type species by monotypy. Herrmannsen (1852, p. 74) listed *Lithasia* and included only *L. geniculata*. Tryon (1863, 1865b) used *Lithasia* as a subgenus of *Angitrema*, but subsequently elevated *Lithasia* to full generic status (Tryon, 1865c). Pilsbry & Rhoads (1896, p. 496) considered *Angitrema* to be a subgenus of *Lithasia*, a decision that was further supported by Goodrich (1921).

3. Errors regarding the date of publication for *Ellipstoma* are common. Herrmannsen (1846, p. 418) & Scudder (1882, p. 120) both listed *Ellipstoma* (correct spelling), but cited 1819 as the date for the name. They also noted the variant spelling, *Ellipsostoma* (see para. 2 of the Application above). Later Scudder listed only the correct spelling, but again cited the date as 1819 (Scudder, 1884, p. 110). Sherborn (1926, p. 2117) and Neave (1939, p. 214) correctly listed the date of publication for *Ellipstoma* as 1818, and also noted the 1819 reference. Sherborn (1926, p. 2117) also noted Agassiz's misspelling. Stein (1976, p. 38) following Morrison (1954, p. 363)

used *Pleurocera* (*Ellipstoma*) *gibbosa*, but cited the date of publication of the specific name as 1820.

4. Recognition and usage of specific names included in *Ellipstoma* have been inconsistent. Binney (1860, pp. 8–9) listed *E. gibbosa* and *E. zonalis*, but *E. marginula* was listed as *E. marginata*, and all were placed in the genus *Melania*; *E. rugosa* was overlooked. H. & A. Adams (1854, p. 301) used *Melania* and included the misspelling *Ellistoma* as a synonym. Later, Binney (1863, p. 325) listed *E. gibbosa*, *E. zonalis* and *E. rugosa*, but overlooked *E. marginula*. Tryon (1873, p. xxi) reviewed all the preceding work on the family STREPOMATIDAE. Under the genus *Leptoxis* he commented on Rafinesque's 1819 paper and decided not to accept the genus *Ellipstoma* or any of its included species. He later concluded that *Ellipstoma* Rafinesque, 1819 was a senior synonym of *Anculosa* Say, 1821 (Tryon, 1873, p. xxxiv). Both Pilsbry (1917, pp. 110–111) and Goodrich (1929, p. 2) listed *Ellipstoma* and the included species as indeterminate. Fischer (1885, p. 706), Thiele (1929, p. 194) and Wenz (1938, p. 701) listed *Ellipstoma* Rafinesque, 1818 with a question mark under the genus *Anculosa*. Vaught (1989, p. 29) and Millard (1997, p. 86; 2001, p. 422) tentatively (and in the latter case as a misspelling, see para. 2 of the Application above) included it under *Anculosa*. Morrison (1954, p. 363) recognized *Ellipstoma* containing a single species as a subgenus of *Pleurocera*, using *Pleurocera verrucosa* Rafinesque as the type species of *Pleurocera*. Stansbery (1971, p. 11) listed *Ellipstoma gibbosa* Rafinesque, 1818 as rare and endangered with no further comments. Graf's (2001) lexicon not only overlooked all four species included by Rafinesque in *Ellipstoma* but incorrectly credited Binney as author of the taxa. Consistent usage of the name *Ellipstoma* was limited to works by Morrison (1954) and Stein (1976).

5. Rafinesque (1818a, p. 355) described a new genus *Pleurocera* and included six nominal species without descriptions, rendering them nomina nuda. The following year he again described the genus but without including any species (Rafinesque, 1819, p. 423). He later described *P. verrucosa*, the first species with an available name to be included in the genus (Rafinesque, 1820, p. 11). The incorrect subsequent spelling *Pleurocerus* was published in combination with the new specific name *P. acutus* Rafinesque in Blainville, 1824 (p. 236) and subsequently corrected to *Pleurocera acuta* (Rafinesque, 1831, p. 3). Tryon (1864, p. 24) applied the name *Pleurocera* to the group including *P. acuta*. Hannibal (1912, p. 169) subsequently designated *P. verrucosa* as the type species of *Pleurocera* based on a rough sketch in Rafinesque's unpublished '*Conchologia Ohioensis*' that to him clearly represented *Melania nupera* Say, 1829, a junior subjective synonym of *P. verrucosa*. Walker (1917, p. 2) stated that reference to Rafinesque's unpublished '*Conchologia Ohioensis*' was 'entirely inadmissible . . . under any construction of the International Code'. He further argued (p. 7) that 'Hannibal's designation of *verrucosa* as the type of *Pleurocera*, in 1912, [was] entirely immaterial, as it was either invalid or unnecessary . . .' and then (p. 9) formally designated *Pleurocera acuta* 'as the type of the genus *Pleurocera* Raf.'.

6. The problem concerning the type species of *Pleurocera* was resolved by Opinion 1195 (BZN 38: 259–265) fixing it under the plenary power as *Pleurocerus acutus* Rafinesque in Blainville, 1824. The Commission's ruling on the type species of *Pleurocera* allowed *P. verrucosa* to remain in the genus *Lithasia* as it had been considered a species of either *Lithasia* or *Angitrema* (= *Lithasia*).

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Case 3232

Melania curvicostata* Reeve, 1861 and *Goniobasis paupercula* Lea, 1862 (currently *Elimia curvicostata* and *E. paupercula*; Mollusca, Gastropoda): proposed conservation by designation of a neotype for *M. curvicostata

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Abstract. The purpose of this application, under Articles 75.5 and 75.6 of the Code, is to conserve, by designation of a neotype for *Melania curvicostata*, the specific names of two well-known freshwater snail species: *Melania curvicostata* Reeve, 1861 (currently *Elimia curvicostata*) and *Goniobasis paupercula* Lea, 1862 (currently *E. paupercula*) (family PLEUROCERIDAE) from the southeastern U.S.A. The nomenclatural stability of these names is threatened because none of the remaining syntypes of *E. curvicostata* is the one that was figured in the original description of *E. curvicostata*. This syntype is believed to be lost and the remaining syntypes have recently been recognized as specimens of *E. paupercula*.

Keywords. Nomenclature; taxonomy; Mollusca; Gastropoda; PLEUROCERIDAE; *Elimia curvicostata*; *Elimia paupercula*; freshwater snails; southeastern United States.

1. The names *Melania curvicostata* and *M. densicostata* were established by Reeve (1861, pl. 58, species 462 and 465 respectively) for what he thought were two species of freshwater snails (currently *Elimia*, family PLEUROCERIDAE) from Florida in the southeastern U.S.A. The genus *Elimia* H. & A. Adams, 1854 (p. 300) consists of approximately 135 recognized species of freshwater snails. In the adults of most species the juvenile whorls, which have characters important for species discrimination and phylogenetic interpretation, are lost above the apical plug (Thompson, 2000). This causes convergence in adult shell appearance among different species within the genus. The original figures and descriptions of both nominal taxa are virtually identical and since Tryon (1864, p. 34) the two names have been treated as synonyms. The name *E. curvicostata* (Reeve, 1861) has priority by action of the First Reviser (see Tryon, 1864, p. 34; Clench & Turner, 1956; Chambers, 1990, p. 262; Article 24.2) over *E. densicostata* (Reeve, 1861). The syntypes of both *E. curvicostata* (BMNH 1994056) and *E. densicostata* (BMNH 1994057) are from the Hugh Cuming Collection in The Natural History Museum, London. The syntypes were sent to Cuming by John G. Anthony with manuscript labels stating their locality as 'Florida, United States'. This is the type locality published by Reeve (1861). As Anthony is

known to have sometimes confused locality data (see Goodrich, 1931), we have little assurance that these specimens actually came from Florida. The shells figured in the original descriptions of both these species are no longer present in either of the respective syntype series.

2. In the case of *Elimia curvicostata*, the original illustration shows a more elongate and slender specimen than any currently present in the syntype series. Recent examination of the extant syntypes of *E. curvicostata* has revealed that the specimens are in fact *Goniobasis paupercula* Lea, 1862 (p. 268), currently *Elimia paupercula* (see Lea, 1863, p. 324, pl. 38, fig. 176 for illustrations), a well-known species from tributaries of the Tennessee River in northern Alabama (see Goodrich, 1940, p. 15; Burch & Tottenham, 1980, p. 140). The lectotype of *E. paupercula* (USNM 118923; Graf, 2001, p. 79) is accurately depicted by Lea's illustration and there is no question that it is the same species as extant populations in northern Alabama. Figure 1 illustrates a syntype of *E. curvicostata* and Figures 2 & 3 illustrate specimens for comparison of *E. paupercula* from a known locality. If the extant syntypes of *E. curvicostata* are considered to represent the original concept to which this name was applied then the name *E. curvicostata* is a senior subjective synonym of *E. paupercula*. However, as stated in para. 1 above, this appears to have been a composite type series and only the figured specimen (now believed lost) actually belonged to the nominal taxon known as *E. curvicostata*.

3. The extant syntypes of *Elimia densicostata* exhibit some of the adult shell characters of *E. curvicostata* .Reeve, 1861. One of the syntypes is illustrated in Figure 4. However, the heavy ribs, lack of spiral striations and single peripheral spiral cord on the uppermost juvenile whorl are features that are common to several species.

4. In order to conserve prevailing usage and maintain stability of the names *Elimia curvicostata* and *E. paupercula*, a specimen (Florida Museum of Natural History 292208) is proposed as the neotype of *E. curvicostata*. The specimen is labeled: 'United States, Florida, Jackson Co., Florida Caverns State Park, Blue Hole Spring, 5.6 miles (9.3 km) north of Marianna (30°44.2' N, 85°14.6' W); collected 20 January, 2002 by Fred G. Thompson'. It is illustrated in Figures 5 & 6. The shell is conical, with a straight-sided spire diverging at an angle of 30°; its periostracum is brown with a narrow light-tan zone just below the suture and light-tan ribs. The sculpture is of bold, slightly arched, synchronized ribs that are about as wide as their interspaces. The ribs continue onto the last whorl where they end at the periphery. The juvenile portion of the shell has distinct axial ribs that extend from the suture to the peripheral carina that is weakly scalloped where it intercepts the ribs. Succeeding whorls are nearly flat-sided. There are 4.8 whorls below the apical plug and 3.2 dead whorls remaining above. Weak incremental striations are present on and between ribs; incised spiral striations are absent. There are 15 ribs on the penultimate whorl. The aperture is broadly elliptical, nearly quadrangular, in shape. The outer lip of the peristome is moderately receded at the periphery.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Melania curvicostata* Reeve, 1861 and to designate as neotype the specimen (Florida Museum of Natural History 292208) described in para. 4 above;

- (2) to place on the Official List of Specific Names in Zoology the following names:
- (a) *curvicostata* Reeve, 1861, as published in the binomen *Melania curvicostata* and as defined by the neotype designated in (1) above;
 - (b) *paupercula* Lea, 1862, as published in the binomen *Goniobasis paupercula*.

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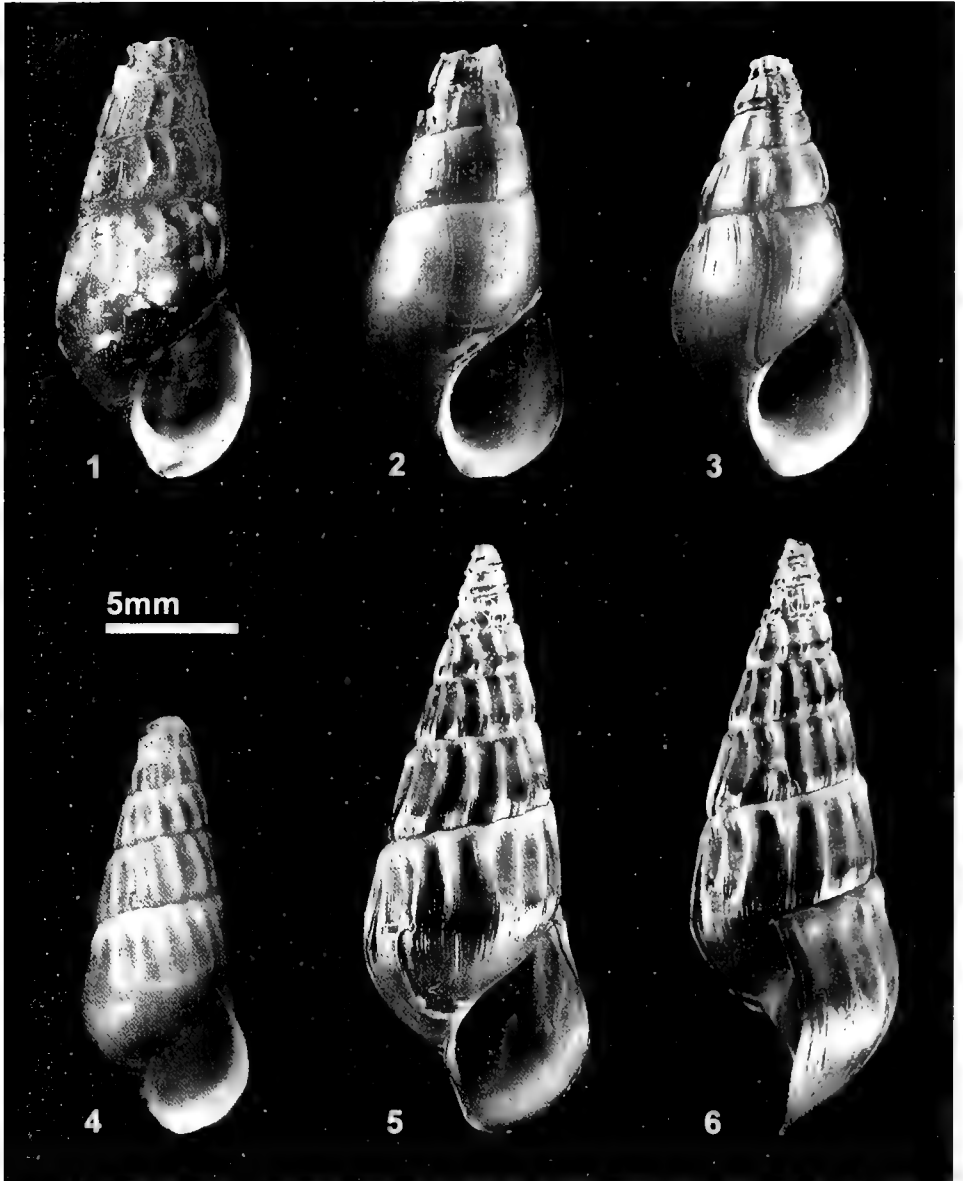


Fig. 1. *Melania curvicostata* Reeve, 1861, syntype BMNH 1994056/1, 'Florida, United States'.

Figs. 2 & 3. *Goniobasis paupercula* Lea, 1862, FMNH 75455, Spring branch affluent of Four-mile Creek, Killen, Lauderdale Co., Alabama.

Fig. 4. *Melania densicostata* Reeve, 1861, syntype BMNH 1994057/1, 'Florida, United States'.

Figs. 5 & 6. *Melania curvicostata* Reeve, 1861, neotype FMNH 292208, Blue Hole Spring, 5-6 miles (9.3 km) north of Marianna, Florida Caverns State Park, Jackson Co., Florida, United States (30° 44.2' N, 85° 14.6' W).

Case 3246***Scorpio chilensis* Molina, 1782 (currently *Bothriurus chilensis*; Arachnida, Scorpiones): proposed suppression of the specific name**

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Abstract. The purpose of this application, under Article 81.1 of the Code, is to ensure nomenclatural stability by suppression of the name *Scorpio chilensis* Molina, 1782 (currently *Bothriurus chilensis*). It is impossible to determine the actual scorpion species to which the name *Scorpio chilensis* was originally applied, and Molina's concept probably included more than one taxon. Subsequent authors have applied the name to various different taxa that occur in Chile and other South American countries. Any attempt to fix the name *Scorpio chilensis* to any one taxon would threaten the usage of the names of the well established Chilean species *Bothriurus vittatus* (Guérin Méneville, 1838), *B. coriaceus* Pocock, 1893 and *B. keyserlingii* Pocock, 1893, resulting in nomenclatural instability.

Keywords. Nomenclature; taxonomy; Arachnida; BOTHRIURIDAE; *Bothriurus*; *Bothriurus coriaceus*; *Bothriurus keyserlingii*; *Bothriurus vittatus*; Chile; South America; Scorpiones.

1. The specific name *Scorpio chilensis* (currently included in family BOTHRIURIDAE) was introduced by Abbot Juan Ignacio Molina (1782, p. 347) in a book devoted to the 'geographic, natural and civic history of the Chilean reign'. The original description of the scorpion to which the name was applied was extremely short and without illustrations. It was presented as a footnote (p. 215) and repeated in the systematic account on p. 347 ('*Scorpio pectinibus 16-dentatis, manibus subangulatis*'). Therefore, this is not a case of a nomen nudum, as claimed by Mello-Leitão (1934). No type material is known to exist. It is very clear from the text that *Scorpio chilensis* sensu Molina actually included not less than two species: 'their ordinary colour is dark brown, but under stones of Río Coquimbo yellow scorpions are found as well'. Cekalovic (1983) and Lowe & Fet (2000) mistakenly assumed the type locality to be Coquimbo.

2. The present difficulties arise not only from Molina's work, but also because there has been no subsequent agreement on which scorpion species was to be denoted by that name. Were it the case that all or most authors shared the same concept for *Scorpio chilensis* (regardless of the specimens that Molina had to hand), it would be easy to 'rescue' or fix the name. However, the history of the usage of this name is too complicated to allow this to be the case (see Lowe & Fet, 2000). Below we provide a summary of the confused history of the usage of the name *S. chilensis* to support our application for its suppression.

3. Karsch (1879, p. 136) first assumed the nominal species *S. chilensis* to be included in the genus *Cercophonius* Peters, 1861, but at least part of the material he

studied actually belongs to the species *Bothriurus vittatus* (Guérin Méneville, 1838) and *Phonocercus pictus* Pocock, 1893. Pocock (1893) described *Bothriurus coriaceus* (p. 95) and *B. keyserlingii* (p. 96), two common central-Chilean species. Although these species have themselves at times been confused (see Lowe & Fet, 2000, who still list *B. keyserlingii* as junior synonym of *B. coriaceus*), their taxonomic identities are now well established (Mattoni & Acosta, unpublished). The same applies to *B. vittatus* which has recently been revised by Mattoni (2002).

4. Kraepelin (1894, p. 232) transferred *S. chilensis* to the genus *Bothriurus* Peters, 1861, and this generic allocation has hitherto been maintained. No fewer than three *Bothriurus* species are included in Kraepelin's concept of *B. chilensis*. In addition, Kraepelin (1894) has synonymised the Brazilian scorpion *B. signatus* Pocock, 1893 with *B. chilensis*. This gives a very wide range for Kraepelin's nominal taxon *B. chilensis*; it includes Chile, Peru, Argentina and Brazil. Pocock (1900, p. 478) noted the inadequacy of Molina's description and of Kraepelin's interpretation. We agree with his statement that 'the name *Scorpio chilensis* of Molina may have been founded upon a species of *Hadruroides*, or *Caraboctonus*, or *Bothriurus*, or, indeed, upon almost any of the species of Bothriuridae or Vaejovidae that occur in Chile. The fact that Karsch identified a particular species as probably referable to the *Scorpio chilensis* of Molina has little or no value in settling what *chilensis* really is'.

5. Several subsequent authors dealt with *S. chilensis*, with almost no agreement on the taxonomic concept involved. Borelli (1899, 1900, 1901) maintained Kraepelin's confusion. In 1899 (p. 6) he mentioned a female *B. chilensis* from Buenos Aires, most probably belonging to *B. bonariensis* (C.L. Koch, 1836). In 1900 (p. 3), he mentioned specimens from Valparaíso (which actually comprised *B. keyserlingii* and *B. coriaceus*), as well as material from Temuco. A specimen from Temuco was used by Mello-Leitão (1934) as the type specimen of his species *Bothriurus borellianus* Mello-Leitão, 1934. Finally, Borelli (1901, p. 11) reported specimens of *B. chilensis* from Uruguay (La Sierra) and Argentina (San Luis, Villa Holga, Cacheuta, Misioneras and Río Santa Cruz), the last three belonging to the '*Bothriurus patagonicus* species-group', according to Maury (unpublished). Penther (1913, p. 252) further recorded *B. chilensis* from Brazil (Río Grande do Sul, Blumenau), Ecuador, Argentina (Mendoza, Potrerillos, San Juan de Perico) and Chile (Juncal).

6. Mello-Leitão (1933, p. 20) referred to *B. chilensis* material from Cuchilloco, province of La Pampa (Argentina) and described specimens from Laferrère and 'Sierras Bajas'. On p. 34 he gives the species range as Chile, Argentina, Peru, Ecuador, Río Grande do Sul and Santa Catarina. In 1934 (p. 85), Mello-Leitão discussed the descriptions of Karsch, Borelli and Guérin Méneville (as *B. vittatus*), mistakenly suggesting that *S. chilensis* should be rejected as a nomen nudum. He then assigned to the nominal taxa *B. karschii* Mello-Leitão, 1934, *B. borellianus* and *B. vittatus* the material examined by Karsch (1879), Borelli (1900) and Guérin Méneville (1838) respectively. Mello-Leitão (1934) also described as *B. prospicius* Mello-Leitão, 1934 those specimens previously identified by him in 1933 as *B. chilensis*. In his 1945 monograph, Mello-Leitão again changed his mind and redescribed *B. chilensis* from material collected in Santiago, remarking that the specimens had 'dilated hand, fingers forming with hand an obtuse inferior angle' and that 'this feature was well emphasized by Molina in his very brief diagnosis: . . . *manibus subangulatis*'. We have examined these specimens and they belong to the nominal species *B. coriaceus*.

7. Werner (1934, p. 291) studied Chilean materials from Victoria (Malleco) and Coronel (Concepción), both actually *B. vittatus* (examined by us). Bücherl (1959, p. 31) re-examined specimens identified by Mello-Leitão as *B. chilensis*, concluding that *B. keyserlingii* is a junior synonym of the former. Bücherl stated in 1963 (p. 197) that '*B. coriaceus*, *B. keyserlingii* and *B. chilensis* are today three unidentifiable species'. He referred to material held in the Museu Nacional (Rio de Janeiro) that had been determined as *B. chilensis* and corrected the identification to *B. coriaceus*.

8. In his catalogue of the genus *Bothriurus*, Maury (1981) listed *B. chilensis*, summarizing the long controversy around the species but without suggesting any action. The most recent catalogues (Cekalovic, 1983, p. 46; Lowe & Fet, 2000, p. 29) still list *B. chilensis* as the valid name of a supposed widespread taxon from Argentina, Chile and Ecuador (and possibly Brazil).

9. As paras. 3–8 above show, there is no agreement as to which taxon the name *Scorpio chilensis* Molina, 1782 represented at the time of its first description. Authors have assigned the name to at least seven different species that occur in Chile (*B. vittatus*, *B. keyserlingii*, *B. coriaceus*, *Phoniocercus pictus*), Argentina (*B. bonariensis*, *B. prospicuus*) and Brazil (*B. signatus*). Assuming that the name *S. chilensis* is really to be referred to the genus *Bothiurus*, we should seek among central Chilean species to determine what Molina described. The main candidates are *B. vittatus*, *B. coriaceus* and *B. keyserlingii*. Not only are the original descriptions of these well established species much better than that for *S. chilensis*, but all three still have existing type specimens, preserved in the The Natural History Museum, London (*B. coriaceus*, *B. keyserlingii*) and in the Muséum National d'Histoire Naturelle, Paris (*B. vittatus*). It should be noted that *Buthus vittatus* (currently *Bothriurus vittatus*) was placed on the Official List of Specific Names in Zoology, and declared not to be invalid despite its being a junior primary homonym of *Buthus vittatus* Say, 1821 (Opinion 1680, BZN 49: 163). The few diagnostic characters given by Molina (1782) proved to be useless. For example, the pectinal teeth count of *Scorpio chilensis* fits equally in the known range of all three mentioned *Bothriurus* (*B. vittatus* 12–20, *B. coriaceus* 12–22, *B. keyserlingii* 12–20; all with mean values around 16; Mattoni, in press; Mattoni & Acosta, unpublished). Any attempt to fix the identity of *Scorpio chilensis* will result in an arbitrary decision, and will threaten the nomenclatural stability of this group of scorpions.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *chilensis*, Molina, 1782, as published in the binomen *Scorpio chilensis*, for the purposes of the Principle of Priority but not for those of the the Principle of Homonymy;
- (2) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *chilensis*, Molina, 1782, as published in the binomen *Scorpio chilensis* and as suppressed in (1) above.

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Case 3238***Rhagodes* Pocock, 1897 (Arachnida, Solifugae): proposed conservation**

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Abstract. The purpose of this application, under Article 81.2.2 of the Code, is to conserve the generic name *Rhagodes* Pocock, 1897 for a group of solifuges or sun spiders (family RHAGODIDAE) by proposed suppression of the older name *Rhax* Hermann, 1804. *Rhagodes* was an unnecessary replacement for *Rhax*, but has been used by almost all authors since 1897. Acceptance of the priority of the name *Rhax* would not serve nomenclatural stability, as it would require all 27 nominal species currently included in *Rhagodes* to be transferred to the nominal genus *Rhax*.

Keywords. Nomenclature; taxonomy; Arachnida; RHAGODIDAE; *Rhagodes*; *Rhagodes melanus*; solifuges; sun spiders; Asia; Africa.

1. In 1804 (p. 13), Hermann used the name *Rhax* for a genus of solifuges or sun spiders (now in family RHAGODIDAE). His brief description of the genus did not include any nominal species, but was supplemented by observations on some historical texts in which sun spiders were mentioned (see footnote on p. 13).

2. C.L. Koch (1839) was unable to recognise the taxon as described by Hermann, but attributed two species to the genus: '*Rh. melas*' and '*Rh. phalangioides*', which refer to *Galeodes melanus* Olivier, 1807 (p. 308) and *G. phalangium* Olivier, 1807 (p. 308), respectively. Under Article 67.2.2 of the Code, both species are eligible for designation as the type species of *Rhax*. However, *Galeodes phalangium* Olivier, 1807 was originally designated as the type species of another nominal genus *Rhagoditta* Roewer, 1933 (p. 277). To my knowledge, a type species has not been explicitly designated for *Rhax*.

3. The generic name *Rhax* was used by some later authors (e.g. Simon, 1879; Kraepelin, 1899, 1901), although these usages attribute the name to C.L. Koch (1839) and not to Hermann (1804).

4. Pocock (1897, p. 252) was of the opinion, wrongly under the current Code, that Hermann's name *Rhax* was invalid and so he established the replacement name *Rhagodes*. Pocock took this view because he believed that Hermann (1804) had intended *Rhax* to be a synonym of *Galeodes* Olivier, 1791. Although he did not nominate a type species for the genus, Pocock later (1900, p. 148) designated *Galeodes melanus* Olivier, 1807 as the type species of *Rhagodes*, which under Article 67.8 also becomes the type species of *Rhax*. Pocock (1897, p. 252) erected the subfamily RHAGODINAE for *Rhagodes*, which was elevated to family status by Roewer (1933). *Rhagodes* currently contains 27 desert-dwelling species, ranging from central Asia through to north-eastern Africa.

5. Despite the views of Pocock (1897), the name *Rhax* Hermann, 1804 is available under the Code and Pocock's decision to establish a replacement name did no more than create a junior objective synonym. However, the senior synonym *Rhax* has not been used as a valid name since Kraepelin (1901) and has been fully supplanted by the junior synonym *Rhagodes*. Reversion to the senior name *Rhax* would be a destabilising action that would require all 27 nominal species currently included in *Rhagodes* to be transferred to the nominal genus *Rhax*. Article 23.9.2 cannot be invoked because Kraepelin used *Rhax* in 1901.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Rhax* Hermann, 1804 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Rhagodes* Pocock, 1897 (gender: feminine), type species *Galeodes melanus* Olivier, 1807 by subsequent designation by Pocock (1900);
- (3) to place on the Official List of Specific Names in Zoology the name *melanus* Olivier, 1807, as published in the binomen *Galeodes melanus* (specific name of the type species of *Rhagodes* Pocock, 1897);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Rhax* Hermann, 1804, as suppressed in (1) above.

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Case 3244**TERMOPSISIDAE Holmgren, 1911, *Termopsis* Heer, 1849 and *Mioterмес* Rosen, 1913 (Insecta, Isoptera): proposed conservation of prevailing usage by the designation of *Termopsis breinii* Heer, 1849 as the type species of *Termopsis***

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Abstract. The purpose of this application, under Article 70.2 of the Code, is to conserve the current usage of the generic names *Termopsis* Heer, 1849 and *Mioterмес* Rosen, 1913 and the family name TERMOPSISIDAE Holmgren, 1911 for well known groups of termites. Both nominal genera have the same type species, *Termopsis procerus* Heer, 1849, and it is proposed that this problem of synonymy be resolved by designation of *Termopsis breinii* Heer, 1849 as the type species of *Termopsis*.

Keywords. Nomenclature; taxonomy; Isoptera; TERMOPSISIDAE; *Termopsis*; *Mioterмес*; *Termopsis breinii*; *Termopsis procerus*; termites.

1. Heer (1849, p. 23) named the termite genus *Termopsis* (at that time as a subgenus of *Termes* Linnaeus, 1758) and included five new fossil species, two of which were *Termopsis breinii* Heer, 1849 (p. 31) and *T. procerus* Heer, 1849 (p. 23), in Middle Eocene Baltic amber. Heer did not select any of the five species as the type species of *Termopsis*. Holmgren (1911, p. 35) established the family-group name TERMOPSISINAE based on *Termopsis*.

2. Handlirsch (1907, p. 698) designated *Termopsis procerus* Heer, 1849 as the type species of *Termopsis* and was the first author to explicitly designate a type species from one of Heer's originally included five species. Cockerell (1916, p. 138) also claimed to have designated *T. procerus* as the type of *Termopsis*.

3. Banks (in Banks & Snyder, 1920, p. 9) selected *Termopsis insignis* Heer, 1849 as the type species of *Termopsis* but, although he correctly chose one of Heer's original species, his action was not valid since Handlirsch (1907, p. 698) had already designated *T. procerus* as the type species.

4. Hagen (1854, p. 222) included only *Termopsis breinii* Heer in *Termopsis*, transferring four of Heer's original five species to the genus *Hodotermes* Hagen, 1853. Later, Hagen (in Pictet-Baraban & Hagen, 1856, p. 51; 1858a, p. 32 and 1858b, p. 12) again included only *T. breinii* of Heer's original five species in *Termopsis*. Although

Hagen never specifically mentioned *T. breinii* as the type species of *Termopsis*, his elimination of all species except *T. breinii* was interpreted later by Emerson (1933, p. 165) as the fixation of a type species. Article 69.4 states that 'elimination of all but one of the originally included nominal species from a nominal genus or subgenus does not in itself constitute type fixation'. Had Handlirsch (1907) not already designated *T. procerus* Heer, 1849 as the type species of *Termopsis* (and had Banks (1920) not chosen *T. insignis*), Emerson's (1933, p. 165) subsequent acceptance of *T. breinii* as the type species of *Termopsis* would have been valid under Article 69.1.1. This Article states that 'in the absence of a prior type fixation for a nominal genus or subgenus, an author is deemed to have designated one of the originally included nominal species as type species, if he or she states (for whatever reason, right or wrong) that it is the type or type species'.

5. Girard (1879, p. 270) selected *T. angusticollis* Hagen, 1858a as the type species of *Termopsis*. Similarly, Wasmann (1897, p. 149) selected *Termes occidentis* Walker, 1853 as the type species of *Termopsis*. Since neither *T. angusticollis* nor *T. occidentis* was originally included in *Termopsis* by Heer (1849), these designations are invalid under Article 67.2.

6. Rosen (1913, p. 325) described a new termite genus *Miotermes*, with *T. procerus* Heer, 1849 as the type species by original designation and monotypy and transferred the species to the family MASTOTERMITIDAE, a family proposed by Desneux (1904) for the primitive Australian termite *Mastotermes darwiniensis* Froggatt, 1897 (see Opinion 1808, 1995, BZN 52: 206).

7. However, Snyder (1949, p. 360), in a catalog of the termite species of the world, followed Emerson's (1933) conclusion concerning Hagen's various actions (1854, 1856, 1858a, 1858b) and listed *T. breinii* as the type species of *Termopsis*.

8. All authors since Snyder (1949) have followed the invalid interpretation of Emerson (1933) and have considered *Termopsis* to apply to *T. breinii* and related species. They have employed the family-group name TERMOPSISIDAE Holmgren, 1911 (p. 35) for *Termopsis* (sensu current usage) and its relatives in an extensive systematic (e.g., Wilson, 1971; Thorne & Carpenter, 1992; Nel & Paicheler, 1993; Weitschat & Wichard, 1998, 2002; Krishna & Grimaldi, 2000; Thorne, Grimaldi, & Krishna, 2000), biological (Weidner, 1955; Stuart, 1963, 1969; Krishna, 1969; Howse, 1970; Roonwal, 1970; Watson & Gay, 1991; Thorne et al., 1993; Kambhampati & Eggleton, 2000), and agricultural (Harris, 1971; Lee & Wood, 1971; Scheffrahn & Su, 1992; Su & Scheffrahn, 2000) literature.

9. As *T. procerus* is the valid type species of both the genus *Termopsis* Heer, 1849 and the genus *Miotermes* Rosen, 1913, the name *Termopsis* (family TERMOPSISIDAE) is formally a senior objective synonym of *Miotermes* (family MASTOTERMITIDAE).

10. Acceptance of this situation would be detrimental to the stability of termite nomenclature as all the species presently included in *Miotermes* would have to be transferred into the genus *Termopsis* and a new name would be needed for the genus that would include the species that had been included in *Termopsis*. The next available name is *Xestotermopsis* Rosen, 1913, a name that is currently considered to be a junior synonym of *Termopsis*. There would also be confusing complications associated with the family names TERMOPSISIDAE and MASTOTERMITIDAE, as *Termopsis* is the type genus of TERMOPSISIDAE. The name TERMOPSISIDAE Holmgren, 1911 would become a junior synonym of MASTOTERMITIDAE Desneux, 1904 and a substitute name

would be needed for the family currently known as TERMOPSIDAE. The name STOLOTERMITINAE Holmgren, 1911 (p. 45) (currently used for a subfamily of TERMOPSIDAE) would be available, but its introduction at family rank would be confusing.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Termopsis* Heer, 1849 and to designate *Termopsis breinii* Heer, 1849 as type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Termopsis* Heer, 1849 (gender: masculine), type species by designation in (1) above *Termopsis breinii* Heer, 1849;
 - (b) *Mioterme*s Rosen, 1913 (gender: masculine), type species by original designation and monotypy *Termopsis procerus* Heer, 1849;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *breinii* Heer, 1849, as published in the binomen *Termopsis breinii* (specific name of the type species of *Termopsis* Heer, 1849);
 - (b) *procerus* Heer, 1849, as published in the binomen *Termopsis procerus* (specific name of the type species of *Mioterme*s Rosen, 1913);
- (4) to place on the Official List of Family-Group Names in Zoology the name TERMOPSIDAE Holmgren, 1911 (type genus *Termopsis* Heer, 1849).

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Termopsis bremii Heer, 1849 in Baltic Amber.

Case 3257***Acmaeodera oaxacae* Fisher, 1949 and *Polycesta deserticola* Barr, 1974 (Insecta, Coleoptera): proposed precedence of the specific names over those of *Acmaeodera philippinensis* Obenberger, 1924 and *Polycesta aruensis* Obenberger, 1924 respectively**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the specific names *Acmaeodera oaxacae* Fisher, 1949 and *Polycesta deserticola* Barr, 1974 for two species of jewel beetle (family BUPRESTIDAE) by giving them precedence over their respective little-used and poorly defined senior synonyms: *Acmaeodera philippinensis* Obenberger, 1924 and *Polycesta aruensis* Obenberger, 1924. The subjective synonymy of *A. philippinensis* and *A. oaxacae* is published here for the first time.

Keywords. Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Acmaeodera oaxacae*; *Polycesta deserticola*; *Acmaeodera philippinensis*; *Polycesta aruensis*; jewel beetles.

1. Obenberger (1924) described two species of jewel beetle (family BUPRESTIDAE) from specimens in Prague and named them *Acmaeodera philippinensis* (p. 94) from 'Philippines' (an evidently wrong locality) and *Polycesta aruensis* (p. 100) from 'Ins. Aru' (Aru Island, Indonesia; also a wrong locality). Each species was represented by a single specimen. Later, both of these nominal species were listed in the Buprestidae I fascicle of the *Coleopterorum Catalogus* compiled by Obenberger (1926, pp. 42, 84).

2. Fisher (1949, p. 340) described *Acmaeodera oaxacae* from 'Tehuantepec, Oaxaca, Mexico', basing his name on a series of ten specimens. Additional notes and comments on the distribution and biology of this species have been made by Westcott et al. (1979, p. 176; 1990, p. 222) and Hespeneheide (1996, p. 235). The species is common and is now known to be distributed in Mexico from Oaxaca to Sonora.

3. Barr (1974, p. 6) described *Polycesta deserticola* from a long series of specimens from a wide range in southern California and Arizona. The species was long known (since LeConte, 1860) in the U.S.A. as *P. velasco* auctorum and Barr's description of *P. deserticola* restricted *P. velasco* Gory & Laporte, 1838, which is in fact an unrelated species, to Mexico. Notes about distribution and biology of *P. deserticola*

have been made by Nelson (1980, p. 94), Cobos (1981, p. 63), Bellamy (1982, p. 360), Westcott (1991, p. 78) and Nelson et al. (1996, p. 190). *P. deserticola* is also known to occur in Mexican localities throughout Baja California and in Sonora.

4. Volkovitsh (1984, p. 559) published a discussion about *A. philippinensis* and concluded that the unique type specimen was mislabeled and belongs to the *A. bivulnera* Horn, 1894 species group (of which *A. oaxacae* is a member) that is only known from North America, in particular the southwestern United States and Mexico.

5. Bílý & Bellamy (1996, p. 182) synonymized *P. deserticola* under *P. aruensis* after noting that the handwritten label on the type specimen of *P. aruensis* had apparently been misread by Obenberger (1924, p. 100) who wrongly assumed its type locality to be Aru Island (see para. 1 above). Bílý & Bellamy (1996) interpreted 'Ariz' to mean Arizona rather than Aru Island.

6. One of us (C.L.B.) has compared the type specimens of *A. philippinensis* and *A. oaxacae* and finds them to be conspecific. This synonymy is published here for the first time.

7. As neither of the older names in these two synonymies is based on a specimen with correct locality data, and since neither of these specific names reflects the real distribution of these species or has had appreciable usage, we believe that the respective younger taxon names should be given precedence over the misleading senior names whenever the pairs of names are considered to be synonyms.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

- (a) to give the specific name *oaxacae* Fisher, 1949, as published in the binomen *Acmaeodera oaxacae*, precedence over the name *philippinensis* Obenberger, 1924, as published in the binomen *Acmaeodera philippinensis*, whenever the two are considered to be synonyms;
- (b) to give the specific name *deserticola* Barr, 1974, as published in the binomen *Polycesta deserticola*, precedence over the name *aruensis* Obenberger, 1924, as published in the binomen *Polycesta aruensis*, whenever the two are considered to be synonyms;

(2) to place on the Official List of Specific Names in Zoology the following names:

- (a) *oaxacae* Fisher, 1949, as published in the binomen *Acmaeodera oaxacae*, with the endorsement that it is to be given precedence over the name *philippinensis* Obenberger, 1924, as published in the binomen *Acmaeodera philippinensis*, whenever the two are considered to be synonyms;
- (b) *deserticola* Barr, 1974, as published in the binomen *Polycesta deserticola*, with the endorsement that it is to be given precedence over the name *aruensis* Obenberger, 1924, as published in the binomen *Polycesta aruensis*, whenever the two are considered to be synonyms;
- (c) *philippinensis* Obenberger, 1924, as published in the binomen *Acmaeodera philippinensis*, with the endorsement that it is not to be given priority over the name *oaxacae* Fisher, 1949, as published in the binomen *Acmaeodera oaxacae*, whenever the two are considered to be synonyms;

- (d) *aruensis* Obenberger, 1924, as published in the binomen *Polycesta aruensis*, with the endorsement that it is not to be given priority over the name *deserticola* Barr, 1974, as published in the binomen *Polycesta deserticola*, whenever the two are considered to be synonyms.

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Case 3254

***Aphodius niger* Illiger, 1798 (Insecta, Coleoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application, in relation to Articles 57.3.1 and 59.1 of the Code, is to conserve the specific name *Aphodius niger* Illiger, 1798 for a widely distributed and endangered species of European dung beetle. At present, this nominal species is invalidly referred to as *Scarabaeus niger* Panzer, 1797 (currently *Aphodius niger* (Panzer, 1797), a senior secondary homonym of *Aphodius niger* Illiger, 1798). It is proposed that *Aphodius niger* Illiger, 1798 be conserved by suppression of the name *Scarabaeus niger* Panzer, 1797. Panzer's actual species is considered to be conspecific with *Aphodius granarius* (Linnaeus, 1767) or *Aphodius varians* Duftschmid, 1805, but not with *Aphodius niger* Illiger, 1798. A lectotype for *Aphodius niger* Illiger, 1798 is designated.

Keywords. Nomenclature; Coleoptera; SCARABAEIDAE; *Aphodius*; *Aphodius niger*; dung beetle; endangered species; British Red Data Book; U.K. Biodiversity Action Plan; Europe.

1. Panzer (1797, p. 1) described and named *Scarabaeus niger*, a species of scarab beetle (family SCARABAEIDAE). As far as we know there is no extant type material (Eisinger, 1919; Horn et al., 1990, p. 295). At present, this name (which is currently used in the combination *Aphodius* (*Liothorax*) *niger* (Panzer, 1797)) is incorrectly applied (see para. 2 below) to a widespread species of European beetle that is localized within its distribution range. This invalid name (see para. 4 below) is used in all current works on European APHODIINAE (APHODIIDAE) (e.g. Paulian, 1959, p. 171;

Dellacasa, 1983, p. 281; Jessop, 1986, p. 24; Krell & Fery, 1992, p. 234; Baraud, 1992, p. 195; Bunalski, 1999, p. 103) and in the world catalogue of APHODIIDAE by Dellacasa (1986, p. 232). It is listed as 'endangered' (RDB 1) in the British Red Data Book (Shirt, 1987, p. 176) and is the subject of a Biodiversity Action Plan (Anonymous, 1995, p. 123).

2. Ádám (1994, p. 6) thought that the name *S. niger* Panzer, 1797 was being misapplied as the species currently referred to as *Aphodius (Liothorax) niger* (Panzer, 1797) did not match the description of the species named *Scarabaeus niger* by Panzer in 1797. Ádám suggested the species originally named *S. niger* by Panzer (1797) was in fact conspecific with *Aphodius varians* Duftschmid, 1805. In our opinion, Ádám's interpretation of *S. niger* Panzer is probably incorrect. However, Creutzer (1799, p. 20) correctly synonymized *S. niger* Panzer with *S. granarius* Linnaeus, 1767 (currently *Aphodius granarius* (Linnaeus, 1767)). This synonymy has been overlooked by all subsequent authors (e.g. Dellacasa, 1986, p. 382), because Creutzer's comments on Panzer's species were erroneously cited as the description of a new species '*Aphodius niger* Creutzer, 1799' by Schönherr, 1806 (p. 77), Dellacasa, 1986 (p. 168) and others.

3. Ádám (1994, p. 6) also noted that the name *Scarabaeus niger* Panzer, 1797 was in fact a junior primary homonym of *Scarabaeus niger* Giorna, 1791 (a nomen oblitum for an unidentified species of the subfamily CETONIINAE). As a result, it could not be used as the valid name for *Aphodius varians*. To avoid the homonymy, he redescribed the species that had been named *Scarabaeus niger* Panzer, 1797 and named it *Aphodius muscorum*. This replacement name has not gained wide recognition in the current literature (not even in the Hungarian literature, see Sár, 1998, p. 205; Nádai & Merkl, 1999, p. 218). Only Ádám himself (1996, p. 305; 1998, p. 263) and Bordat (1999, p. 81) have used this new name (in the combination *Liothorax muscorum*).

4. Illiger (1798, p. 24) described a scarab beetle from Sweden and various parts of Germany and named it *Aphodius niger*, erroneously referring to *Scarabaeus niger* Panzer, 1797. Evidently, Illiger thought he was redescribing *S. niger* Panzer and not a new species. However, Illiger's beetle species is clearly not that described by Panzer, and is easily recognizable as a member of the subgenus *Liothorax* Motschulsky, 1859, and as the endangered species currently and invalidly known as *Aphodius (Liothorax) niger* (Panzer, 1797). According to Horn et al. (1990, p. 183), Illiger's type material has been deposited partly in the Museum für Naturkunde, Berlin, and partly in the Staatliches Naturhistorisches Museum Braunschweig. In Braunschweig, no material of *A. niger* with labels matching Illiger's handwriting was found (J. Hevers, curator, pers. comm., 27 June 2001).

5. We have inspected the specimens labelled *Aphodius niger* from the historic collection in Berlin and they are all the species currently known as *Aphodius (Liothorax) niger* (Panzer, 1797). There are seven specimens in the series, which has the reference number 25810. This is a printed label attached to the first specimen, but duplicated by the Museum on all the other specimens. The series name-label is pinned to the first specimen (a female), and its data are written in three rows, in dark brown ink. The first row reads 'niger', the second 'Pz Gyl', later altered in black ink, with the 'Pz' crossed out and 'Ill' added, and an asterisk (*) added after 'Gyl.'. The third row reads 'Sc. Terrestris Pz'. These data match those used by Illiger in his published

description of *Aphodius niger*. The labelled female specimen lacks locality data, as do three of the other specimens. One specimen has a handwritten label 'Austria' (not given as a locality in Illiger's description of *A. niger*), and there are two males with handwritten labels 'Suec'. These Swedish specimens are the only ones whose locality is mentioned in Illiger's description, and therefore the only specimens that can be unambiguously identified as syntypes. To ensure that the type material matches the type locality of Illiger's description and thus to avoid any future nomenclatural or taxonomic confusion, we herewith designate one of the Swedish specimens from this series as the lectotype, and have labelled it as such. The other specimen from Sweden has been labelled as the paralectotype.

6. Since Illiger (1798) published the specific name *niger* in combination with *Aphodius* rather than *Scarabaeus*, his name is not a junior primary homonym of *S. niger* Panzer, 1797 (or of the nomen oblitum *S. niger* Giorna, 1791). However, it is a junior secondary homonym of *Aphodius (Liothorax) niger* (Panzer, 1797); see Articles 57.3.1 and 59.1. To ensure permanent clarification of the confusion this could cause, we propose suppression of the name *Scarabaeus niger* Panzer, 1797. The species to which Panzer actually applied this name already has the senior synonym *Aphodius granarius* (Linnaeus, 1767). In addition, suppression of *Scarabaeus niger* Panzer, 1797 will also provide protection for later names if these are considered to be synonyms of Panzer's name as has occurred for *Aphodius varians* Duftschmid, 1805.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *niger* Panzer, 1797, as published in the binomen *Scarabaeus niger*, for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *niger* Illiger, 1798, as published in the binomen *Aphodius niger* and as defined by the lectotype designated in para. 5 above;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *niger* Panzer, 1797, as published in the binomen *Scarabaeus niger* and as suppressed in (1) above.

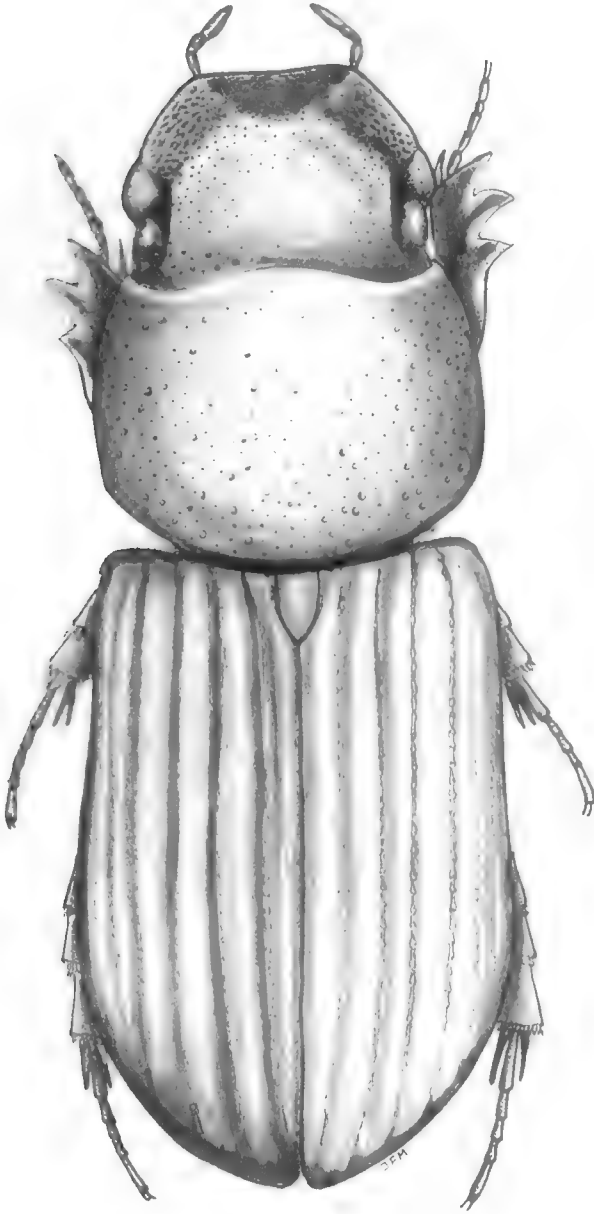
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Aphodius niger Illiger, 1798 Hortobagy [Hungary] NP. Ujszentmargita margital erdo fuhalozva 1974.v.28 leg. Vasarhelyi [labelled 'Aphodius muscorum Adam/Det. Adam, 1984'] Actual length: 5 mm.

Drawing by Jason F. Maté.

Case 3194

Lius Deyrolle, 1865 (Insecta, Coleoptera): proposed conservation

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the generic name *Lius* Deyrolle, 1865 for a group of jewel beetles (family BUPRESTIDAE) by suppressing its unused senior primary homonym *Lius* Chevrolat, 1838.

Keywords. Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Lius*; *Lius ignitus*; buprestids; jewel beetles.

1. Dejean (1833, p. 83) used the beetle generic name *Lius*, which he attributed to 'Eschscholtz' without a date. He gave no description of the genus, but included seven specific names. However, these are all nomina nuda, and so the name *Lius* Dejean is not available from this work. Dejean (1833) also introduced the beetle generic name *Brachys* (p. 83) without description but included *Trachys tessellata* Fabricius, 1801 and four nomina nuda. Thus *Brachys* is an available name under Article 12.2.5 of the Code and *T. tessellata* is the type species by monotypy. In the same year, Solier (1833, p. 312) provided a description for *Brachys* and listed *Trachys tessellata* as the only included species.

2. In 1838 (p. 104), Chevrolat used the generic name *Lius* for a new nominal species, *Lius deplanatus* (a jewel beetle; family BUPRESTIDAE). Saunders (1871, p. 135) transferred *L. deplanatus* Chevrolat, 1838 to *Pachyschelus* Solier, 1833 (the type species by monotypy is *Pachyschelus scutellatus* Solier, 1833), thus treating *Lius* Chevrolat, 1838 as a junior subjective synonym of *Pachyschelus*.

3. Deyrolle (1865, p. 219) used the name *Lius* in a key and attributed three nominal buprestid species to it in a footnote as 'types du genre: *Br. ignitus*, *aculeatus*, *exiguus*, etc. Gory'.

4. Cobos (1979, p. 425) subsequently designated *Brachys ignitus* Gory & Laporte, 1840 (p. 6) as the type species of *Lius* Deyrolle, 1865.

5. All authors subsequent to Deyrolle's (1865) diagnosis of *Lius* have attributed authorship of this name to Deyrolle including Waterhouse (1889, p. 135); Kerremans (1892, p. 294; 1893, p. 122; 1903, p. 321); Obenberger (1937, p. 1345); Blackwelder (1944, p. 338); Bellamy (1985, p. 428) and Holyński (1993, p. 15).

6. Although the name *Lius* Deyrolle, 1865 is a junior homonym of *Lius* as used by Chevrolat (1838), the name has not been used in its earlier sense because *Lius* Chevrolat, 1838 is a junior synonym of *Pachyschelus* Solier, 1833. As *Lius* Chevrolat, 1838 has not been used since 1899, it qualifies as a nomen oblitum under Article 23.9.1.1. The name *Lius* Deyrolle, 1865 has been in considerable use for *Brachys ignitus* Gory & Laporte, 1840 and related species (see para. 5 above). Despite this, the

name has not had sufficient usage to allow its 'automatic' conservation under Article 23.9.2. So this case is brought to the Commission under the provision of Article 23.9.3.

7. The International Commission on Zoological Nomenclature is accordingly asked:
- (1) to use its plenary power to suppress the generic name *Lius* Chevrolat, 1838 for the purposes of both the Principle of Priority and the Principle of Homonymy;
 - (2) to place on the Official List of Generic Names in Zoology the name *Lius* Deyrolle, 1865 (gender: masculine), type species by subsequent designation by Cobos (1979) *Brachys ignitus* Gory & Laporte, 1840;
 - (3) to place on the Official List of Specific Names in Zoology the name *ignitus* Gory & Laporte, 1840, as published in the binomen *Brachys ignitus* (specific name of the type species of *Lius* Deyrolle, 1865);
 - (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Lius* Chevrolat, 1838, as suppressed in (1) above.

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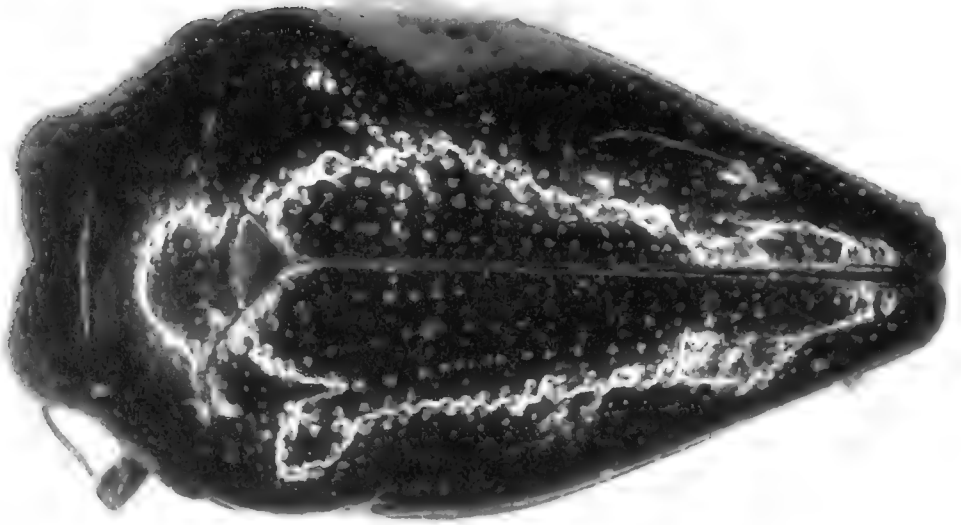


Fig. 1. *Lius simulator* Obenberger, 1924.

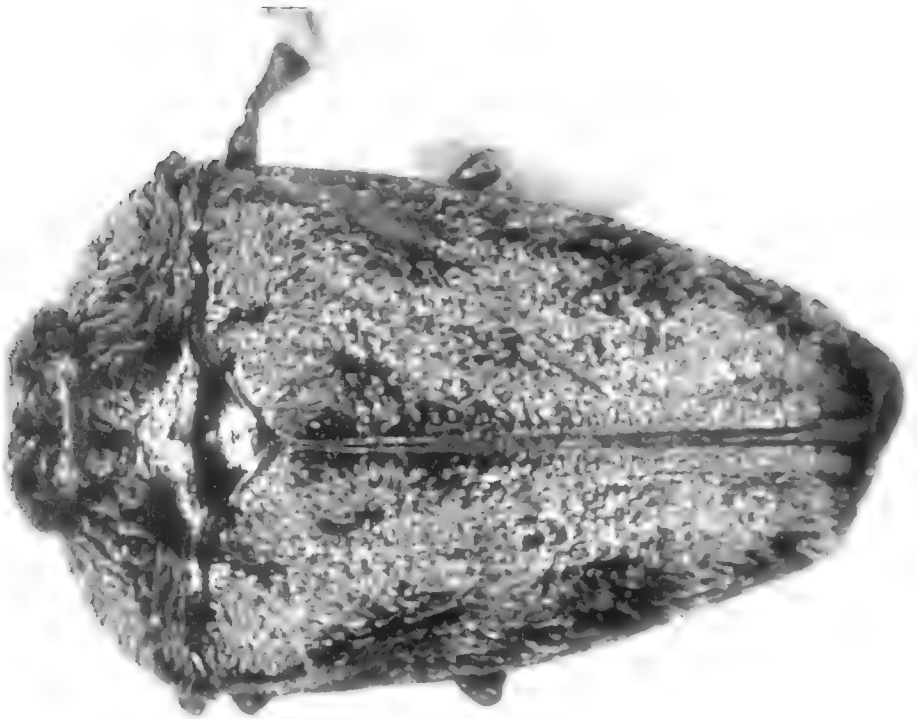


Fig. 2. *Pachyschelus signatus* Waterhouse, 1889.

Case 3230

***Colobodus* Agassiz, 1844 (Osteichthyes, Perleidiformes): proposed designation of *C. bassanii* de Alessandri, 1910 as the type species, with designation of a neotype**

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Abstract. The purpose of this application, which relates to Chapter 15 of the Code, is to set aside all previous type fixations for the fossil fish genus *Colobodus* Agassiz, 1844 and to designate *Colobodus bassanii* de Alessandri, 1910 as the type species. The nominal species *Colobodus bassanii* is the best representative of the characteristics of the genus *Colobodus*. A neotype is designated for *Colobodus bassanii* under Article 75.3 of the Code.

Keywords. Nomenclature; taxonomy; Osteichthyes; Perleidiformes; fossil fish; *Colobodus*; *Colobodus bassanii*; Middle Triassic; Besano Formation; Italy; Switzerland.

1. Agassiz (1833–1844, p. 237; for the exact year of publication (1844) see Woodward & Sherborn, 1890, pp. xxv–xxix) described a new genus and new species of fossil fish in the name *Colobodus hogardi*. *C. hogardi* is therefore the type species of *Colobodus* by monotypy (p. 237). The description was made from a single crushing-teeth battery of an unidentified bone, but the bone was not figured. The tooth plate's outline is diamond-shaped; its teeth are striated and topped by a central wart. The specimen originates from the Upper Muschelkalk of Lunéville (France; Middle Triassic).

2. The name *C. hogardi* has been quoted, listed or mentioned, but rarely applied (e.g. Giebel, 1847, vol. 1, p. 181; 1853, vol. 2, p. 325 and Woodward, 1895, p. 69). Only Dames (1888, vol. 4, pp. 159–160) has applied the name, but without giving explicit reference to similar specimens in any collection. It appears that in 1967 the *C. hogardi* holotype was destroyed by a fire on the third floor of the Department of Palaeontology and Geology (EOST) at the Louis Pasteur University of Strasbourg (J.-C. Gall, Strasbourg, pers. comm., 2000).

3. In 1910, de Alessandri described well-preserved fish remains from the Besano Formation (Lombardy, Italian/Swiss border; Middle Triassic; Grenzbitumenzone) of the Monte San Giorgio/Besano basin, and thereby established the new species *Colobodus bassanii*. From de Alessandri's (1910, p. 76) description, the crushing teeth are morphologically identical with *C. hogardi* Agassiz. De Alessandri introduced the new species *Colobodus bassanii* based on several specimens, four of them figured, displaying characters of head, fins, dentition and scales. These details greatly widened our knowledge of the genus *Colobodus* (see de Alessandri, 1910, pp. 74–81; table 2, fig. 4; table 3, figs. 1–3).

4. In all representative works (e.g. Andersson, 1916; Beltan, 1972; Nybelin, 1977; Ørvig, 1978; Bürgin, 1996 and Cartanya, 1999), *C. bassanii* has subsequently been regarded as the most completely preserved and best known nominal species of the genus *Colobodus*. I am currently revising the family COLOBODONTIDAE Andersson, 1916.

5. The type material of *Colobodus bassanii* de Alessandri, 1910 was probably destroyed during the second World War (1943) in the Museo Civico di Storia Naturale in Milano (A. Tintori, Milano, pers. comm., 1998). However, large-scale excavations in the last century (see Kuhn-Schnyder, 1974) have yielded well-preserved and relatively complete specimens of *C. bassanii*. Most of these are now stored at The Natural History Museum, London (in the 'Carl Bender' collection) and at the Paläontologisches Institut und Museum der Universität Zürich.

6. As the original type material of *Colobodus bassanii* de Alessandri, 1910 has been destroyed, I herewith designate a neotype for this nominal species in accord with Article 75.3.4. According to Article 75.3.6, the neotype should, if possible, come from the same geological horizon as the original name-bearing type. The Middle Triassic Besano Formation site where de Alessandri found his holotype specimen of *C. bassanii* (see para. 3) has provided other specimens of this species from the same stratigraphical context. I designate the comparatively fully preserved specimen T 4843 from this locality (and now held in the collection of the Paläontologisches Institut und Museum der Universität Zürich) as the neotype for *Colobodus bassanii* de Alessandri, 1910.

7. The type material for the nominal species *Colobodus hogardi* Agassiz, 1844 has been destroyed, no additional well-preserved material has been found and the name has not been widely used. In addition, the characteristics of the genus *Colobodus* Agassiz, 1844, as currently understood, are better represented by the nominal species *Colobodus bassanii* de Alessandri, 1910 than by the nominal species *Colobodus hogardi* Agassiz, 1844. As a result I propose that, in the interests of maintaining the current understanding of the name *Colobodus* Agassiz, 1844, *Colobodus bassanii* de Alessandri, 1910 should be designated as its type species in place of *Colobodus hogardi* Agassiz, 1844.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal genus *Colobodus* Agassiz, 1844, and to designate *Colobodus bassanii* de Alessandri, 1910 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Colobodus* Agassiz, 1844 (gender: masculine), type species by designation in (1) above and as defined by the neotype designated in para. 6 above *Colobodus bassanii* de Alessandri, 1910;
- (3) to place on the Official List of Specific Names in Zoology the name *bassanii* de Alessandri, 1910, as published in the binomen *Colobodus bassanii* (specific name of the type species of *Colobodus* Agassiz, 1844).

Acknowledgements

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Case 3226**Lacepède, B.G.É. de la V., 1788, *Histoire Naturelle des Quadrupèdes Ovipares*: proposed rejection as a non-binominal work**

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Abstract. The purpose of this application, under Article 11.4 of the Code, is to ensure nomenclatural stability by suppression of Lacepède's (1788) work *Histoire Naturelle des Quadrupèdes Ovipares* (and all subsequent editions of this work) as an unavailable, non-binominal work.

Keywords. Nomenclature; taxonomy; Lacepède; *Histoire Naturelle des Quadrupèdes Ovipares et des Serpens*.

1. In 1788–89, Count Bernard Germain Étienne de la Ville Lacepède published a two volume work entitled *Histoire Naturelle des Quadrupèdes Ovipares et des Serpens*. These two volumes were the last two in Buffon's (1749–67; 1774–89) monumental and best-selling *Histoire Naturelle Générale et Particulière*. Lacepède's first volume (1788a) deals with the egg-laying quadrupeds (*Quadrupèdes Ovipares*) and the second volume (1789) deals with the serpents (*Serpens*). A later, smaller format edition of Lacepède's work appeared as the final volumes (1788b, 1790) of another edition of Buffon's *Histoire Naturelle*.

2. Buffon and his associates, including Lacepède, did not accept or use the Linnaean binominal system (see Stresemann, 1975, pp. 56, 94; Roger, 1997, pp. 311–312), although some of Lacepède's Latinized French vernacular names were employed by later authors. In particular, Bonnaterre (1789–90) gave most of Lacepède's taxa binominal names if an older binominal was not already available. In fact, Bonnaterre scooped Buffon and his associates by being the first in France to use binominal (Linnaean) names for many groups of animals.

3. Brongersma (1972; BZN 29: 44–61) in an application to the Commission demonstrated that Lacepède's *Histoire Naturelle des Serpens* was not consistently binominal and proposed that it be ruled an unavailable work. Subsequently in 1987 (Opinion 1463; BZN 44: 265–267), the Commission suppressed this work and its later editions, while conserving the long-established name *Crotalus piscivorus* Lacepède, 1789 (currently *Agkistrodon piscivorus*) notwithstanding that it was published in an unavailable work. However, the status of Lacepède's first volume (*Histoire Naturelle des Quadrupèdes Ovipares*) was not addressed.

4. The situation with the *Histoire Naturelle des Quadrupèdes Ovipares* is exactly parallel to that in the *Histoire Naturelle des Serpens*. All the names used in the text are in the vernacular, although binominal names of other authors (principally Linnaeus) are listed in the bibliographic footnote accompanying many species descriptions. Latin names are also used in the foldout table, labeled *Synopsis Methodica Quadrupedum Oviparum* (between pages 618 and 619 near the end of the

volume). These names correspond to those presented in the foldout *Table Méthodique Quadrupèdes des Ovipares* located just before page 1 in the text. In the *Table*, the vernacular French or names in other languages used in the text are listed. In the *Synopsis*, the French vernacular names are translated into Latin (e.g., T.[ortue] Chagrinee becomes *T.[estudo] punctata*) but those derived from the common names of other languages are retained (e.g. 'Le Mabouya' becomes *Mabouya*).

5. Verification of these facts and those in the next paragraph is based on examination of four copies of Lacepède (1788a, 1789), two at the L.M. Klauber Library (San Diego Natural History Museum), one at the Allan Hancock Foundation Library (University of Southern California) and my personal copy. These copies differ slightly in the placement of the *Table Méthodique* and *Synopsis*. The page numbers given above are from my copy. I also know of one copy at the University of Michigan that lacks the *Synopsis*. This was apparently removed a considerable time after publication. I have also examined a copy of Lacepède (1788b, 1790) in the L.M. Klauber library whose contents do not differ from that of the quarto edition.

6. Although five columns in the *Synopsis* are headed by the term 'Genus', the names 'Testudo', 'Lacertus', 'Rana', 'Hyla' and 'Buffo' stand as translations of French vernacular names. Two additional columns lack genus headings and contain one species name each, 'B. Canaliculatus' and 'Sheltopusik'. In the columns, uninominal, binominal and trinominal names are listed depending upon the language of the vernacular used in the body of this work. Those derived from the French are preceded by an abbreviation T., B., R., H. or B.; those from other languages are uninominal. In the genus 'Testudo', there are 19 binominal, 4 uninominal and one trinominal species names. For the genus 'Lacertus', there are 29 binominal names, 25 uninominals and one trinominal. For 'Rana', there are 11 binominals and one uninominal; for 'Hyla' six binominals and a trinominal; for 'Buffo' 12 binominals and four uninominals. It is clear from these data that, as in the *Serpens* volume, Lacepède did not consistently use a binominal nomenclatural system in his *Quadrupèdes Ovipares*. Mayer & Lazell (2000) have recently reached the same conclusion. Thus, Lacepède (1788a) should join Lacepède (1789) as works rejected for nomenclatural purposes.

7. Buffon's original *Histoire Naturelle* series was enormously popular and many editions (the 'Suites à Buffon'), often duplicated in quarto, octavo or smaller format sets, and translated into other European languages (e.g. Bechstein, 1800–1802; Lacepède, 1802) appeared every decade until at least 1885. I have found reference to at least 15 different editions containing Lacepède's names. I have not seen copies of all these and there are probably several more. The later versions do not pose any nomenclatural threat to other species names because of Bonnaterre's (1789–1790) actions. Nevertheless, rejection of Lacepède's 1788a work, and all later editions of this work, promotes universality and stability since it would prevent attempts to preoccupy such generic names as *Lacertus* and *Buffo* in zoological nomenclature.

8. Just as in the case of the *Histoire Naturelle des Serpens*, a number of Lacepède's Latinized vernacular names from *Histoire Naturelle des Quadrupèdes Ovipares* have been adopted as valid from as far back as Gray (1831). Fortunately, suppression of the *Histoire Naturelle des Quadrupèdes Ovipares* does not affect these names as all were given proper binominals based on Lacepède's names in Bonnaterre's (1789–1790) binominal work.

9. The names in question in para. 8 are (in the order they appear in Lacepède's work):

Testudo terrapen Bonnaterre, 1789, p. 30 (currently *Trachemys terrapen*)

Testudo subrubra Bonnaterre, 1789, p. 27 (currently *Kinosternon subrubra*)

Testudo punctata Bonnaterre, 1789, p. 30 (currently *Lissemys punctata*)

Testudo subrufa Bonnaterre, 1789, p. 28 (currently *Pelomedusa subrufa*)

Testudo subnigra Lacepède in Bonnaterre, 1789, p. 30 (currently *Pelusios subniger*; see Opinion 1534; BZN 46: 81–82; 1989)

Lacerta mabouya Bonnaterre, 1789, p. 51 (currently *Mabuya mabouya*)

Lacerta roquet Bonnaterre, 1789, p. 54 (currently *Anolis* or *Dactyloa roquet*)

Salamandra terdigitata Bonnaterre, 1789, p. 64 (currently *Salamandrina terdigitata*).

10. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to rule that the work entitled *Histoire Naturelle des Quadrupèdes Ovipares* by Lacepède (1788), and any subsequent editions of this work, are not available for nomenclatural purposes, and that no name acquires the status of availability by reason of having been published in any of them;

(2) to place on the Official Index of Rejected and Invalid Works in Zoological Nomenclature the work entitled *Histoire Naturelle des Quadrupèdes Ovipares* by Lacepède (1788) and all subsequent editions of this work, as ruled in (1) above.

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Draft proposal to emend the Code with respect to trace fossils: request for comments

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The Code covers not only names for biological taxa but those for the ‘fossilized work of organisms (ichnotaxa)’ as well (Article 1.2.1). In ichnology, an ichnotaxon is considered to be the name attached to a trace fossil (e.g. Bromley, 1990; Magwood, 1992; Pickerill, 1994)—a term that is used ambiguously in the Code’s Glossary only for ‘fossilized trails, tracks or burrows’. In fact, many other biogenic structures are trace fossils as well and the obsolete term ‘work of an animal’ is not used in modern ichnologic literature. This contribution aims at a future clarification of the meaning of the term ‘ichnotaxa’ and the meaning of the terms used for related taxa that are frequently confused with ichnotaxa.

A trace fossil may generally be defined as a morphologically recurrent structure resulting from the life activity of an individual organism (or a monospecific group of organisms) that modifies the substrate (e.g. Bromley, 1996). This means that ‘fossilized work of organisms’ in which a substrate is not modified qualifies neither as a trace fossil nor as an ichnotaxon. Fossil eggs and plant galls are the work of animals, but are not trace fossils. Secretions produced by organisms are not trace fossils. It follows that such ‘work of animals’, e.g. spider webs, cocoons, pupal cases, pearls and calculi, likewise, are not trace fossils. As representatives of most of these groups have received names governed by the Code, they are currently classified in a parataxonomic scheme. Trace fossils, on the other hand, are not objects of parataxonomy; ichnotaxa do not compete in priority with names for their producers (Article 23.7.3). Some other structures that are occasionally listed as trace fossils, e.g. stromatolites, pathologic structures and soils as well as signs of human technology, are neither ichnotaxa nor the ‘fossilized work of an organism’ and should not be covered by the Code.

This discussion underlines the discrepancy in the terminology of the Code as opposed to the one generally used in the relevant scientific subdiscipline. This discrepancy may result in misunderstandings and contradictory claims about the legal standing of names established for biogenic structures that are not trace fossils. For this reason we propose refinement of the wording of the Code and the use of less ambiguous terms to distinguish between various animal products and true trace fossils. We propose that the Glossary definition of ‘work of an animal’ be emended to read: ‘trace fossils (including burrows, borings and etchings, tracks and trackways, coprolites, gastroliths, regurgitaliths, nests, leaf mines, bite and gnaw structures), as well as secretions such as eggs, cocoons, pupal cases, spider webs, embedment structures and plant galls’. With this definition, it will not be necessary to replace the term ‘work of an animal’ in Articles 1.2.1, 10.5, 12.2.8 and 72.5.1 by ‘trace fossils’.

An additional point independent of the above proposal relates to the nomenclatural treatment of ichnofamilies. It is illogical to demand criteria for their establishment that differ from those for other ichnotaxa. Also, with ichnotaxa being treated in very much the same way as biological taxa, we recommend that the principle of typification be extended to the naming of ichnofamilies. This would be consistent

with the current provisions for the typification of ichnogenera and ichnospecies (Articles 13.3.3, 42.2.1 and 42.3.2).

In addition, we propose the deletion of an unnecessary sentence dealing with ichnotaxa based on recent traces (Article 1.3.6). This article allows usage of ichnotaxa erected on recent traces prior to 1931, but there seem to be no grounds for this provision. We are not aware of any case where names based on recent traces are actually used. If they had been validly established they would no longer be available due to their status of *nomina oblita*, anyway.

Finally, numerous new ichnotaxa have been established in the last decades by their authors using the abbreviations 'igen.' for ichnogenus and 'isp.' for ichnospecies. We advocate that 'igen.' and 'isp.' be approved as the legitimate abbreviations for ichnogenus and ichnospecies, respectively, for use in open nomenclature and for the designation of new ichnotaxa. In relation to this, Recommendation 16A of the Code should be emended to include reference to 'igen. n.', 'isp. n.', etc. for ichnotaxa.

Comments on this draft proposal are invited and should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

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- (1) *Geological and Palaeontological Institute, University of Münster, Corrensstr. 24, D-48149 Münster, Germany* (*corresponding author).
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- (5) *Institute of Geology, Academy of Sciences of the Czech Republic, Rozvojová 135, CZ-16500 Praha 6, Czech Republic.*
- (6) *Geological Museum, Øster Voldgade 5 7, DK-1350 Copenhagen K, Denmark.*
- (7) *Geological Survey of Alabama, P.O. Box 869999, Tuscaloosa, AL 35486-6999, U.S.A.*
- (8) *Institute for Palaeontology, Pleicherwall 1, D-97070 Würzburg, Germany.*
- (9) *Institute of Geological Sciences, Jagiellonian University, ul. Oleandry 2a, PL-30 063 Kraków, Poland.*

Comments on the neotypification of Protists, especially Ciliates (Protozoa, Ciliophora)

(General Article; see BZN 59: 165–169; 60: 48–49)

(1) Jean Dragesco

394 Boulevard du Grand Devois, F-34980 Saint-Clement-de-Rivière, France

I fully support Wilhelm Foissner's proposal that the neotypes of protists, especially Ciliates, should be freed from the type locality regulation of Article 75.3.6 of the Code, provided that neotypification is based on a thorough redescription of the organisms and usable neotype material has been deposited in an acknowledged repository.

(2) Khaled A.S. AL-Rasheid

Zoology Department, College of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia

I support Wilhelm Foissner's proposal that the neotypes of protists, especially Ciliates, should be freed from the type locality regulation of Article 75.3.6 of the Code, as it is not applicable to protists.

Comments on the proposed conservation of *Cyphosoma* Mannerheim, 1837 and proposed precedence of *Halecia* Laporte & Gory, 1837 over *Pristiptera* Dejean, 1833 (Insecta, Coleoptera)

(Case 3205; see BZN 59: 249–252)

(1) Vladimir Sakalian

Institute of Zoology, Bulgarian Academy of Sciences, 1 Tzar Osvoboditel Blvd, 1000 Sofia, Bulgaria

I support this application, as it will ensure nomenclatural stability.

(2) Roman B. Holyński

PL-05822 Milanówek, ul. Graniczna 35, skr. poczt. 65, Poland

I do not support this application. I do not approve of junior names being given precedence over senior names. In the cases of *Cyphonota* and *Pristiptera* there is no justification for setting aside the Principle of Priority and for conserving errors by giving precedence to junior synonyms. Consequently, I ask the Commission to reject the application.

Comment on the proposed precedence of *Aegorhinus* Erichson, 1834 (Insecta, Coleoptera) over *Psuchocephalus* Latreille, 1828
(Case 3214; see BZN 59: 253–255)

M.A. Alonso-Zarazaga

Depto. de Biodiversidad y Biología Evolutiva, Museo Nacional de Ciencias Naturales-CSIC, José Gutiérrez Abascal 2, E-28006 Madrid, Spain

C.H.C. Lyal

Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

We fully support the application presented by our colleagues M. Elgueta and G. Kuschel to give precedence to *Aegorhinus* Erichson, 1834 over *Psuchocephalus* Latreille, 1828, being subjective synonyms. When we published our Catalogue (Alonso-Zarazaga & Lyal, 1999), we knew the existence of Article 23.9.1 of the then forthcoming 4th Edition of the Code, but at that time we could not find the number of records required to meet the requirements of Article 23.9.1.2, so we opted for Priority.

We have already stated our agreement with Kuschel & Elgueta (Alonso-Zarazaga & Lyal, 2002, p. 22) and endorse the exact terms of this application.

Additional reference

Alonso-Zarazaga, M.A. & Lyal, C.H.C. 2002. Addenda and corrigenda to *A World Catalogue of Families and Genera of Curculionoidea (Insecta: Coleoptera)*. *Zootaxa*, **63**: 1–37.

Nomenclatural note

The authorship and dates of Pieter Cramer's *De Uitlandsche Kapellen*: a request for comments from lepidopterists

J.E. Chainey

Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

In 1958 (Opinion 516), the Commission approved a set of dates and authorship for *De Uitlandsche Kapellen* by Pieter Cramer (this work was completed by Caspar Stoll after Cramer's death). However, several facts have come to light that might have influenced the Commission's ruling had they been noted at the time. In addition, authors are not always following the Opinion, particularly with regard to the authorship of this work.

(1) The main purpose of Opinion 516 was to assign relative precedence to five publications issued in 1775. Cramer's work was deemed to have been published on December 31st and come last in precedence because there was no evidence of when it had been published, other than the year 1775. However, a letter (held in The Natural History Museum, London) from the entomologist Dru Drury (1725–1803) to the publisher Sepp dated 27 November 1775 states that 'Cramer's work is badly coloured', indicating that at least the first part was then available. This date would give Cramer (1775) precedence over Denis & Schiffermüller (1775), which Opinion 516 stated as having been published on 8 December.

(2) The publication dates given in Opinion 516 are partly based on the assertion that Cramer died in 1780. In particular, the publication date of volume 3, part 22, was set at 1780 (instead of 1779 as given on the original wrappers of a copy held in the library of The Natural History Museum, London), because a footnote by Stoll on p. 107 refers to the death of Cramer. However, Cramer died in September 1776, as noted by Stoll (1780) and Smit, Sanders & van der Veer (1986).

(3) Dos Passos (1958) states that the dates and spellings of the specific names in *De Uitlandsche Kapellen* should be taken from the indexes, since these are the only part of the work that is consistently binominal. Subsequent authors have ignored the dates suggested by Dos Passos and, in any case, the dates he cites for the publication of the indexes do not agree with the above-mentioned copy with its original wrappers. Based on these wrappers, the correct dates for the indexes for each volume are 1776 (vol. 1), 1777 (vol. 2), 1780 (vol. 3) and 1782 (vol. 4). However, some authors have accepted the spellings of names as given in the indexes for the reason cited by Dos Passos.

(4) Acceptance of the indexes as the valid source of the names in *De Uitlandsche Kapellen* would also affect authorship. The whole of volume 4 would be attributable to Stoll, and almost certainly also volume 3. In an announcement of his forthcoming work on Cicadas, Stoll (1780) discusses progress with *De Uitlandsche Kapellen* and states: 'mais le nombre des Planches étant porté à présent à 360, don't 264 [i.e. up to volume 3, part 22] ont déjà vu le jour'. Since the published arrangement and sequence of the figures differ from the original plates, it seems unlikely that Cramer's plans would have been sufficiently advanced for him to have prepared the index to volume 3.

Although there are continuing inconsistencies in the citation of this work, it is considered that the stability of dates and authorship are best served by application of Opinion 516, and this is here recommended as the best course of action. It is also recommended that the spellings of Cramer's names follow the indexes, since these are conformed to by current usage (and in most cases there is no difference between spellings in the indexes and the main text). However, comments are invited from lepidopterists on whether or not a case should be made to take account of any of the above points. Acceptance of any of the first three points could affect the priority of some names, though point 2 applies to relatively few taxa. Points 3 and 4 should be taken together, and acceptance would rule out either points 1 or 2.

References

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- Denis, J.N.C.M. & Schiffermüller, I.** 1775. *Ankündigung [sic] eines systematisches Werken von den Schmetterlinge der Wienergegend*. 322 pp. Wien.
- Dos Passos, C.F.** 1958. The dates and authorships of some names proposed by Cramer and Stoll in *De Uitlandsche Kapellen voorkomende in de drie Waereld-deelen Asia, Africa en America*, and by Stoll alone in *Aanhangel van het werk, de Uitlandsche Kapellen, voorkomende in de drie Waereld-deelen Asia, Africa en America, door den heere Pieter Cramer [1775]-1791*. *Lepidopterist's News*, **12**: 195–198.
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- Stoll, C.** 1780–82. *De Uitlandsche Kapellen voorkomende in de drie Waereld-deelen Asia, Africa en America*. [Papillons exotique des trois parties de Monde l'Asie, l'Afrique et l'Amerique]. Vol. 4: 1–252, pls. CCCV–CCCC. S.J. Baalde, Amsterdam; B. Wild, Utrecht.
- Stoll, C.** 1780. *Natuurlyke en naar't leeven naauwkeurig gekleurde afbeeldingen en beschryvingen der Cicaden en Wantzen, in alle vier waerelds deelen Europe, Asia, Africa en America*. [Représentation exactement colorée d'après nature des Cigales et des Punaises, qui se trouvant dans les quatre parties du monde, l'Europe, l'Asie, l'Afrique et l'Amerique.] 12 pp. Jan Christian Sepp, Amsterdam.

Comments on this note are invited for publication (subject to editing) in the *Bulletin*: they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

OPINION 2031 (Case 2710)**CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda): proposal to remove the homonymy not approved**

Abstract. The Commission has ruled that the homonymy between CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda) should not be removed. It had been proposed that the gastropod name should be emended to CLAVUSINAE by changing the stem of the type genus *Clavus* de Montfort, 1810 from CLAV- to CLAVUS-. However, the Commission rejected this proposal because DRILLIINAE Olsson, 1964, the next available synonym for the gastropod name, provided a satisfactory alternative that was already being widely used instead of CLAVINAE for this group of gastropods. No names are placed on Official Lists or Indexes.

Keywords. Nomenclature; taxonomy; CLAVIDAE; CLAVINAE; *Clava*; *Clavus*; Hydrozoa; Gastropoda.

Ruling

- (1) Proposals put forward to remove the homonymy between CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda) by the emendation of the stem of the molluscan type genus *Clavus* de Montfort, 1810 from CLAV- to CLAVUS- were not approved.

History of Case 2710

An application to remove the homonymy between CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda) was received from Walter O. Cernohorsky (*Farm Cove, Pakuranga, Auckland, New Zealand*), Paul F.S. Cornelius (*Department of Zoology, The Natural History Museum, London, U.K.*) and Alexander V. Sysoev (*Laboratory of Helminthology, Russian Academy of Sciences, Moscow, Russia*) on 7 February 1989. After correspondence the case was published in BZN 48: 192–195 (September 1991). Notice of the case was sent to appropriate journals.

Comments opposing the application were published in BZN 49: 144–145 and 49: 222–223. Comments in support of the application were published in BZN 49: 223 and 50: 52. Confirmation of the date of the relevant pages of John McCrady's hydrozoan paper *Gymnophthalmata of Charleston Harbor* was published in BZN 49: 287–289.

Those who opposed the alteration of the molluscan name to CLAVUSINAE Casey, 1904 did so in the confidence that DRILLIINAE Olsson, 1964 is a synonym of CLAVINAE Casey. If further research proves these taxa to be 'biologically and taxonomically distinct' (a possibility mentioned in para. 6 of the original application), there would be a reason for establishing a replacement name for CLAVINAE Casey, because it is a junior homonym of CLAVIDAE McCrady.

Conservation of CLAVUSINAE Casey, 1904 would make it a senior synonym of DRILLIINAE and this would cause confusion because DRILLIINAE is already in common usage for this group of gastropods (e.g. Taylor, Kantor & Sysoev, 1993, *Bulletin of the Natural History Museum*, London (Zoology), **59**(2): 163).

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN **48**: 193–194. At the close of the voting period on 1 March 2003 the votes were as follows: 3 Commissioners (Alonso-Zarazaga, Fortey and Macpherson) voted FOR the proposals, 19 Commissioners voted AGAINST, Böhme and Kerzhner abstained, no vote was received from Mahnert, Ng was on leave of absence.

No names are placed on Official Lists or Indexes and the issue is left open for subsequent workers to follow the precepts of the Code or to make new proposals to the Commission.

OPINION 2032 (Case 3148)**CLARIIDAE Kutikova, Markevich & Spiridonov, 1990 (Rotifera): spelling emended to CLARIAIDAE so removing homonymy with CLARIIDAE Bonaparte, 1846 (Osteichthyes, Siluriformes)**

Abstract. The Commission has ruled that the homonymy between the family-group names CLARIIDAE Kutikova, Markevich & Spiridonov, 1990 (Rotifera) and CLARIIDAE Bonaparte, 1846 (Osteichthyes) is removed by emending the spelling of the rotifer family-group name by adopting the full genus name as the stem, giving the corresponding family-group name CLARIAIDAE Kutikova, Markevich & Spiridonov, 1990. The fish name CLARIIDAE Bonaparte, 1846 remains unchanged.

Keywords. Nomenclature; taxonomy; Rotifera; Osteichthyes; CLARIAIDAE; CLARIIDAE; *Claria*; *Clarias*; rotifers; air breathing (labyrinth) catfishes.

Ruling

- (1) Under the plenary power it is hereby ruled that for the purposes of Article 29.1 of the Code the stem of the generic name *Claria* Kutikova, Markevich & Spiridonov, 1990 is CLARIA-.
- (2) The name *Claria* Kutikova, Markevich & Spiridonov, 1990 (gender: feminine), type species by monotypy *Claria segmentata* Kutikova, Markevich & Spiridonov, 1990 is hereby placed on the Official List of Generic Names in Zoology (Rotifera).
- (3) The name *segmentata* Kutikova, Markevich & Spiridonov, 1990, as published in the binomen *Claria segmentata* (specific name of the type species of *Claria* Kutikova, Markevich & Spiridonov, 1990), is hereby placed on the Official List of Specific Names in Zoology (Rotifera).
- (4) The name CLARIAIDAE Kutikova, Markevich & Spiridonov, 1990, type genus *Claria* Kutikova, Markevich & Spiridonov, 1990 (spelling emended by the ruling in (1) above), is hereby placed on the Official List of Family-Group Names in Zoology (Rotifera).
- (5) The name CLARIIDAE Kutikova, Markevich & Spiridonov, 1990 (spelling emended to CLARIAIDAE by the ruling in (1) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (Rotifera).

History of Case 3148

An application to remove the homonymy between the family-group names CLARIIDAE Kutikova, Markevich & Spiridonov, 1990 (Rotifera) and CLARIIDAE Bonaparte, 1846 (Osteichthyes) by emending the spelling of the rotifer family-group name by adopting the full genus name as the stem, giving the corresponding family-group name CLARIAIDAE Kutikova, Markevich & Spiridonov, 1990, was received from L.A. Kutikova (*Zoological Institute, Russian Academy of Sciences, St Petersburg 199034, Russia*) on 19 October 1999. After correspondence the case was

published in BZN 58: 275–276 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 276. At the close of the voting period on 1 March 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Böhme abstained, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Claria Kutikova, Markevich & Spiridonov, 1990, *Rotifera. Proceedings of the third All-Union Rotifer symposium*, p. 118.

CLARIAIDAE Kutikova, Markevich & Spiridonov, 1990, *Rotifera. Proceedings of the third All-Union Rotifer symposium*, p. 118.

CLARIAIDAE Kutikova, Markevich & Spiridonov, 1990, *Rotifera. Proceedings of the third All-Union Rotifer symposium*, p. 118.

segmentata, *Claria*, Kutikova, Markevich & Spiridonov, 1990, *Rotifera. Proceedings of the third All-Union Rotifer symposium*, p. 120.

OPINION 2033 (Case 3156)***Chiton lepidus* Reuss, 1860 (currently *Lepidochitona lepidus*; Mollusca, Polyplacophora): specific name conserved**

Abstract. The Commission has ruled that the specific name of *Chiton lepidus* Reuss, 1860, for a chiton (currently *Lepidochitona lepidus*, family ISCHNOCHITONIDAE, subfamily LEPIDochITONINAE) from the Middle Miocene of Europe, is conserved. The specific name was threatened by a senior primary homonym *Chiton lepidus* Gould, 1859 (family ISCHNOCHITONIDAE, subfamily ISCHNOCHITONINAE), the name used for a Recent species from the Indo-Pacific.

Keywords. Nomenclature; taxonomy; *Lepidochitona lepidus*; ISCHNOCHITONIDAE; ISCHNOCHITONINAE; LEPIDochITONINAE; chitons; Miocene; Europe; Indo-Pacific.

Ruling

- (1) Under the plenary power it is ruled that the specific name *lepidus* Reuss, 1860, as published in the binomen *Chiton lepidus*, is not invalid by reason of being a junior primary homonym of *Chiton lepidus* Gould, 1859.
- (2) The name *lepidus* Reuss, 1860, as published in the binomen *Chiton lepidus* (not invalid by the ruling in (1) above), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3156

An application to conserve the specific name of *Chiton lepidus* Reuss, 1860 (currently *Lepidochitona lepidus*, family ISCHNOCHITONIDAE, subfamily LEPIDochITONINAE) from the Middle Miocene of Europe was received from Enrico Schwabe (*Münchhausenstrasse 21, Munich, Germany*) on 7 April 2000. After correspondence the case was published in BZN 57: 207–209 (December 2000). Notice of the case was sent to appropriate journals. A comment opposing the application was published in BZN 58: 227 (September 2001) together with a reply from the author clarifying that the application had been submitted under Article 23.9.5.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN 57: 208. At the close of the voting period on 1 March 2003 the votes were as follows: 22 Commissioners voted FOR the proposals, 2 Commissioners (Bouchet and Calder) voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

lepidus, *Chiton*, Reuss, 1860, *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien*, 39(2): 259.

OPINION 2034 (Case 3087)

***Hydrobia* Hartmann, 1821: conserved by replacement of the lectotype of *Cyclostoma acutum* Draparnaud, 1805 (currently *Hydrobia acuta*; Mollusca, Gastropoda) with a neotype; *Ventrosia* Radoman, 1977: *Turbo ventrosus* Montagu, 1803 designated as the type species; and HYDROBIINA Mulsant, 1844 (Coleoptera): spelling emended to HYDROBIUSINA, so removing the homonymy with HYDROBIIDAE Troschel, 1857 (Gastropoda)**

Abstract. The Commission has ruled that: (1) usage of the name *Hydrobia* Hartmann, 1821 for a genus of brackish-water prosobranch gastropods is conserved by replacement of the lectotype of its type species, *Cyclostoma acutum* Draparnaud, 1805, by a neotype; (2) *Turbo ventrosus* Montagu, 1803 is designated the type species of the nominal genus *Ventrosia* Radoman, 1977 and the lectotype designation for *T. ventrosus* by Bank, Butot & Gittenberger (1979) is validated; and (3) the homonymy between the family-group names HYDROBIIDAE Troschel, 1857 (Gastropoda) and HYDROBIINA Mulsant, 1844 (Coleoptera) is removed by emending the stem of the generic name *Hydrobius* Leach, 1815 (Coleoptera) to HYDROBIUS-, leaving the gastropod name based on *Hydrobia* unchanged.

Keywords. Nomenclature; taxonomy; Gastropoda; Coleoptera; *Hydrobia*; *Hydrobius*; *Ventrosia*; *Hydrobia acuta*; *Hydrobia ventrosa*; *Ventrosia ventrosa*; HYDROBIIDAE; HYDROPHILIDAE; HYDROBIUSINA.

Ruling

- (1) Under the plenary power it is ruled that:
 - (a) all type fixations for the nominal species *Cyclostoma acutum* Draparnaud, 1805 are hereby set aside and the specimen no. 90616 in the Naturhistorisches Museum in Vienna is designated as neotype;
 - (b) all type fixations for the nominal species *Turbo ventrosus* Montagu, 1803 prior to the lectotype designation by Bank, Butot & Gittenberger (1979) are hereby set aside;
 - (c) all type fixations for the nominal genus *Ventrosia* Radoman, 1977 are hereby set aside and *Turbo ventrosus* Montagu, 1803 is hereby designated as the type species;
 - (d) for the purposes of Article 29.1 of the Code the stem of the generic name *Hydrobius* Leach, 1815 is HYDROBIUS- (Coleoptera).
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Hydrobia* Hartmann, 1821 (gender: feminine), type species by subsequent designation by Gray (1847) *Cyclostoma acutum* Draparnaud, 1805;
 - (b) *Ventrosia* Radoman, 1977 (gender: feminine), type species by designation under the plenary power in (1)(c) above *Turbo ventrosus* Montagu, 1803.

- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
- (a) *acutum* Draparnaud, 1805, as published in the binomen *Cyclostoma acutum* and as defined by the neotype designated in (1)(a) above (specific name of the type species of *Hydrobia* Hartmann, 1821);
 - (b) *ventrosus* Montagu, 1803, as published in the binomen *Turbo ventrosus* and as defined by the lectotype designated by Bank, Butot & Gittenberger (1979) (specific name of the type species of *Ventrosia* Radoman, 1977).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
- (a) HYDROBIUSINA Mulsant, 1844, type genus *Hydrobius* Leach, 1815 (Coleoptera);
 - (b) HYDROBIIDAE Troschel, 1857, type genus *Hydrobia* Hartmann, 1821 (Gastropoda).
- (5) The name HYDROBIINA Mulsant, 1844 (spelling emended to HYDROBIUSINA by the ruling in (1)(d) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (Coleoptera).

History of Case 3087

An application to stabilise the usage of the name *Hydrobia* Hartmann, 1821 for a genus of brackish-water prosobranch gastropods by the designation of a neotype for the type species, *Cyclostoma acutum* Draparnaud, 1805, and designate *Turbo ventrosus* Montagu, 1803 as the type species of the nominal genus *Ventrosia* Radoman, 1977, and remove the homonymy between the family-group names HYDROBIIDAE Troschel, 1857 (Gastropoda) and HYDROBIINA Mulsant, 1844 (Coleoptera) by emending the stem of the generic name *Hydrobius* Leach, 1815 (Coleoptera) to HYDROBIUS-, was received from F. Giusti, G. Manganelli & M. Bodon (*Dipartimento di Biologia Evolutiva, Università di Siena, Siena, Italy*) on 9 October 1995. After correspondence the case was published in BZN 55: 139–145 (September 1998). Notice of the case was sent to appropriate journals.

A comment on the status of the type material was published in BZN 56: 56–57. Comments opposing the application were published in BZN 56: 57–62, 143–144 and BZN 58: 140–141. Comments in support of the application were published in BZN 56: 62–63, 144–148, 187–190, 268–270; BZN 58: 56–58, 301–303 and BZN 59: 128–130. An additional proposal was published in BZN 58: 58.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals as separately indicated below. At the close of the voting period on 1 March 2003 the votes were as follows:

Vote 1: the proposals set out in BZN 55: 143 para. 12(1)(a) and (3)(a): 17 Commissioners voted FOR the proposals, 4 Commissioners (Alonso-Zarazaga, Bock, Macpherson and van Tol) voted AGAINST, 3 Commissioners abstained, no vote was received from Mahnert, Ng was on leave of absence.

Vote 2: the proposals set out in BZN 55: 143 para. 12(2)(a) and (4)(b): 19 Commissioners voted FOR the proposals, 2 Commissioners (Alonso-Zarazaga and

Bock) voted AGAINST, 3 Commissioners abstained, no vote was received from Mahnert, Ng was on leave of absence.

Vote 3: the proposals set out in BZN 55: 143 para. 12(1)(b), (2)(b) and (3)(b): 19 Commissioners voted FOR the proposals, 2 Commissioners (Alonso-Zarazaga and Bock) voted AGAINST, 3 Commissioners abstained, no vote was received from Mahnert, Ng was on leave of absence.

Vote 4: the proposals set out in BZN 55: 143 para. 12(1)(c), (4)(a) and (5): 20 Commissioners voted FOR the proposals, 2 Commissioners (Alonso-Zarazaga and Bock) voted AGAINST, 2 Commissioners abstained, no vote was received from Mahnert, Ng was on leave of absence.

Vote 5: the additional proposal set out in BZN 58: 58: 18 Commissioners voted FOR the proposals, 3 Commissioners (Alonso-Zarazaga, Bock and Patterson) voted AGAINST, 3 Commissioners abstained, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

acutum, *Cyclostoma*, Draparnaud, 1805, *Histoire naturelle des mollusques terrestres et fluviatiles de la France*, p. 40.

Hydrobia Hartmann, 1821, *Neue Alpina, eine Schrift der Schweizerischen Naturgeschichte, Alpen- und Landwirthschaft Gewiedmet, Winterthur*, 1: 258.

HYDROBIIDAE Troschel, 1857, *Das Gebiss der Schnecken zur Begründung einer natürlichen Classification*, vol. 1, part 2, p. 106.

HYDROBIINA Mulsant, 1844, *Histoire naturelle des coléoptères de France*, vol. 3, p. 116.

HYDROBIUSINA Mulsant, 1844, *Histoire naturelle des coléoptères de France*, vol. 3, p. 116.

Ventrosia Radoman, 1977, *Serbian Academy of Sciences and Arts Monographs Department of Sciences*, 57: 208.

ventrosus, *Turbo*, Montagu, 1803, *Testacea Britannica or natural history of British shells . . .*, vol. 2, p. 317.

The following is the reference for the designation of *Cyclostoma acutum* Draparnaud, 1805 as the type species of *Hydrobia* Hartmann, 1821:

Gray, J.E. 1847. *Proceedings of the Zoological Society of London*, 15: 151.

OPINION 2035 (Case 3146)***Valvata minuta* Draparnaud, 1805 (currently *Hauffenia*, *Neohoratia* or *Islamia minuta*; Mollusca, Gastropoda): conserved by replacement of the lectotype by a neotype**

Abstract. The Commission has ruled that the current usage of the specific name of *Valvata minuta* Draparnaud, 1805 for a small, valvatiform, freshwater prosobranch gastropod (family HYDROBIIDAE) from central Europe is conserved by the replacement of the lectotype by a neotype.

Keywords. Nomenclature; taxonomy; Gastropoda; prosobranchs; HYDROBIIDAE; *Hauffenia minuta*; *Neohoratia minuta*; *Islamia minuta*; Europe.

Ruling

- (1) Under the plenary power it is ruled that all previous type fixations for the nominal species *Valvata minuta* Draparnaud, 1805 are hereby set aside and the specimen no. 100485 in the Naturhistorisches Museum in Vienna is designated as the neotype.
- (2) The name *minuta* Draparnaud, 1805, as published in the binomen *Valvata minuta* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3146

An application to conserve the current usage and understanding of the specific name of *Valvata minuta* Draparnaud, 1805 (currently *Hauffenia*, *Neohoratia* or *Islamia minuta*) for a small, valvatiform, freshwater prosobranch gastropod (family HYDROBIIDAE) from central Europe was received from M. Bodon, G. Manganelli & F. Giusti (*Dipartimento di Biologia Evolutiva, Università di Siena, Siena, Italy*) on 6 October 1999. After correspondence the case was published in BZN 57: 144–146 (September 2000). Notice of the case was sent to appropriate journals. The paper by Bodon, Manganelli & Giusti, cited in paras. 1, 4 and 6 and the reference list of the application as ‘in press’, was published in *Malacologia* (2001), 43: 103–215. The description and illustration of the proposed neotype is on pages 195–196. No comments on this case were received.

Decision of the Commission

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 145. At the close of the voting period on 1 December 2001 the votes were as follows: 22 Commissioners voted FOR the proposals, 2 Commissioners (Halliday and Štys) voted AGAINST, no vote was received from Dupuis, Kerzhner and Song.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

minuta. *Valvata*, Draparnaud, 1805, *Histoire naturelle des mollusques terrestres et fluviatiles de la France*, p. 42.

OPINION 2036 (Case 3153)**HIPPOPODIIDAE Cox, 1969 (Mollusca, Bivalvia): spelling emended to HIPPOPODIUMIDAE, so removing the homonymy with HIPPOPODIIDAE Kölliker, 1853 (Cnidaria, Hydrozoa)**

Abstract. The Commission has ruled that the stem of the name of the type genus *Hippopodium* J. Sowerby, 1819 is emended to HIPPOPODIUM- (Mollusca, Bivalvia) thus removing the homonymy with the family-group name HIPPOPODIIDAE Kölliker, 1853 (based on *Hippopodius* Quoy & Gaimard, 1827) (Cnidaria, Hydrozoa). The spelling of the family-group name HIPPOPODIIDAE COX, 1969, a junior homonym of HIPPOPODIIDAE Kölliker, 1853, is emended to HIPPOPODIUMIDAE.

Keywords. Nomenclature; taxonomy; Hydrozoa; Siphonophorae; Bivalvia; HIPPOPODIIDAE; HIPPOPODIUMIDAE; *Hippopodius*; *Hippopodium*; fossil bivalves; Jurassic; Triassic; Recent.

Ruling

- (1) Under the plenary power it is ruled that for the purposes of Article 29 of the Code the stem of the generic name *Hippopodium* J. Sowerby, 1819 (Bivalvia) is HIPPOPODIUM-.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Hippopodius* Quoy & Gaimard, 1827 (gender: masculine), type species by monotypy *Hippopodius luteus* Quoy & Gaimard, 1827 (a junior subjective synonym of *Gleba hippopus* Forsskål, 1776) (Hydrozoa);
 - (b) *Hippopodium* J. Sowerby, 1819 (gender: neuter), type species by monotypy *Hippopodium ponderosum* J. Sowerby, 1819 (Bivalvia).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *hippopus* Forsskål, 1776, as published in the binomen *Gleba hippopus* (senior subjective synonym of *Hippopodius luteus* Quoy & Gaimard, 1827, the type species of *Hippopodius* Quoy & Gaimard, 1827) (Hydrozoa);
 - (b) *ponderosum* J. Sowerby, 1819, as published in the binomen *Hippopodium ponderosum* (specific name of the type species of *Hippopodium* J. Sowerby, 1819) (Bivalvia).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) HIPPOPODIIDAE Kölliker, 1853, type genus *Hippopodius* Quoy & Gaimard, 1827 (Hydrozoa);
 - (b) HIPPOPODIUMIDAE Cox, 1969, type genus *Hippopodium* J. Sowerby, 1819 (spelling emended by the ruling in (1) above) (Bivalvia).
- (5) The name HIPPOPODIIDAE COX, 1969 (spelling emended to HIPPOPODIUMIDAE by the ruling in (1) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (Bivalvia).

History of Case 3153

An application to emend the spelling of HIPPODIDIIDAE COX, 1969 (Mollusca, Bivalvia) to HIPPODIDIUMIDAE, so removing the homonymy with HIPPODIDIIDAE KÖLLIKER, 1853 (Cnidaria, Hydrozoa) was received from Antonio C. Marques (*Departamento de Biologia, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo, Av. Bandeirantes 3900, Ribeirão Preto, SP, Brazil*), Luiz E. Anelli (*Departamento de Geologia Sedimentar e Ambiental, Instituto de Geociências, Universidade de São Paulo, Rua do Lago, São Paulo, SP, Brazil*) and Marcello G. Simões (*Departamento de Zoologia, Instituto de Biociências, Universidade Estadual Paulista – Botucatu, Botucatu, SP, Brazil*) on 23 June 1999. After correspondence the case was published in BZN 58: 193–195 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 194–195. At the close of the voting period on 1 March 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, 1 Commissioner (Böhme) voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- HIPPODIDIIDAE COX, 1969, *Treatise on invertebrate paleontology*, part N, vol. 2, p. 582.
HIPPODIDIIDAE KÖLLIKER, 1853, *Die Schwimmpolypen oder Siphonophoren von Messina*, p. 28.
Hippodidium J. Sowerby, 1819, *The mineral conchology of Great Britain*, vol. 3, no. 44, p. 91.
HIPPODIDIUMIDAE COX, 1969, *Treatise on invertebrate paleontology*, part N, vol. 2, p. 582.
Hippopodius Quoy & Gaimard, 1827, *Annales des Sciences Naturelles*, 10: 172.
hippopus, *Gleba*, Forsskål, 1776, *Icones rerum naturalium quae in itinere Orientali depingi curavit P. Forskål*, pl. 43, fig. E.
ponderosum, *Hippodidium*, J. Sowerby, 1819, *The mineral conchology of Great Britain*, vol. 3, no. 44, p. 91.

OPINION 2037 (Cases 3120 and 3120a)**LIOCHELIDAE Fet & Bechly, 2001 (1879) (Scorpiones): adopted as a valid substitute name for ISCHNURIDAE Simon, 1879 in order to remove homonymy with ISCHNURINAE Fraser, 1957 (Insecta, Odonata)**

Abstract. The Commission has ruled that the scorpion family name LIOCHELIDAE Fet & Bechly, 2001 (1879) is to have precedence over ISCHNURIDAE Simon, 1879, which is a homonym of the widely used damselfly name ISCHNURINAE Fraser, 1957 (Odonata). The type genus of LIOCHELIDAE is *Liocheles* Sundevall, 1833, which is in wide use as the valid senior subjective synonym of the long abandoned name *Ischnurus* C.L. Koch, 1837 (the type genus of ISCHNURIDAE Simon, 1879). ISCHNURINAE Fraser, 1957 is not to be rejected despite being a junior homonym of ISCHNURIDAE Simon, 1879.

Keywords. Nomenclature; taxonomy; Scorpiones; Odonata; ISCHNURIDAE; LIOCHELIDAE; COENAGRIONIDAE; *Liocheles*; *Ischnura*; scorpions; damselflies.

Ruling

- (1) Under the plenary power it is hereby ruled that:
 - (a) the name LIOCHELIDAE Fet & Bechly, 2001 is to be given precedence over the name ISCHNURIDAE Simon, 1879;
 - (b) the name ISCHNURINAE Fraser, 1957 (Odonata) is not to be treated as invalid by reason of being a junior homonym of ISCHNURIDAE Simon, 1879 (Scorpiones).
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Ischnura* Charpentier, 1840 (gender: feminine), type species by subsequent designation by Selys-Longchamps (1850) *Agrion elegans* Van der Linden, 1823 (type genus of ISCHNURINAE Fraser, 1957);
 - (b) *Liocheles* Sundevall, 1833 (gender: masculine), type species by monotypy *Scorpio australasiae* Fabricius, 1775 (type genus of LIOCHELIDAE Fet & Bechly, 2001 (1879)).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *elegans* Van der Linden, 1823, as published in the binomen *Agrion elegans* (specific name of the type species of *Ischnura* Charpentier, 1840);
 - (b) *australasiae* Fabricius, 1775, as published in the binomen *Scorpio australasiae* (specific name of the type species of *Liocheles* Sundevall, 1833).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) ISCHNURINAE Fraser, 1957 (type genus *Ischnura* Charpentier, 1840; Odonata), with the endorsement that it is not to be treated as invalid by reason of being a junior homonym of ISCHNURIDAE Simon, 1879 (Scorpiones);

- (b) LIOCHELIDAE Fet & Bechly, 2001 (1879) (type genus *Liocheles* Sundevall, 1833; Scorpiones), with the endorsement that it has precedence over the name ISCHNURIDAE Simon, 1879.
- (5) The name ISCHNURIDAE Simon, 1879 (type genus *Ischnurus* C.L. Koch, 1837; Scorpiones), with the endorsement that it is to be treated as junior to LIOCHELIDAE Fet & Bechly, 2001 (1879) (type genus *Liocheles* Sundevall, 1833), is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Cases 3120 and 3120a

An application submitted by Victor Fet (*Department of Biological Sciences, Marshall University, West Virginia, U.S.A.*) and Günter Bechly (*Staatliches Museum für Naturkunde, Rosenstein 1, D-70191 Stuttgart, Germany*), proposing emendation of the name ISCHNURINAE Fraser, 1857 to ISCHNURAINAE, was published as Case 3120 (BZN 57: 26–28). However, once it was realised that the introduction of the family name LIOCHELIDAE (based on *Liocheles* Sundevall, 1833, which is universally used as the senior synonym of *Ischnura* C.L. Koch, 1837) avoided this undesirable change, the case was modified.

A second version of this application was submitted on 10 February 1999. This time the application focused on the adoption of the new scorpion family name LIOCHELIDAE Fet & Bechly, 2001 (1879) as a valid substitute name for ISCHNURIDAE Simon, 1879. After correspondence the application was published as Case 3120a in BZN 58: 280–281 (December 2001). The title, abstract and keywords of this case were published on the Commission's website. Comments in support of the revised application (Case 3120a) were published in BZN 59: 38.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on proposals (3) and (4) published in BZN 57: 27 and the proposals published in BZN 58: 281. At the close of the voting period on 1 March 2003 the votes were as follows: 19 Commissioners voted FOR the proposals, 4 Commissioners (Alonso-Zarazaga, Bouchet, Fortey and Štys) voted AGAINST, Böhme abstained, no vote was received from Mahnert, Ng was on leave of absence.

Voting against, Alonso-Zarazaga commented that 'in this case priority should apply; ISCHNURIDAE Simon, 1879 is widely used in Scorpiones and substitution of this name is both contrary to priority and to stability. Emendation of ISCHNURINAE Fraser, 1957 to ISCHNURAINAE is the simplest course to follow, as well as the closest to the Code. This would avoid the creation of another name (LIOCHELIDAE) whose usefulness is doubtful'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- australasiae*, *Scorpio*, Fabricius, 1775, *Systema entomologiae*, p. 399.
elegans, *Agrion*, Van der Linden, 1823, *Agriones Bononienses descriptae*, p. 104.

Ischnura Charpentier, 1840, *Libellulinae Europaeae descriptae ac depictae*, p. 20.

ISCHNURIDAE Simon, 1879, *Les Arachnides de France. VII. Contenant les Ordres des Chernetes, Scorpiones et Opiliones*, p. 92.

ISCHNURINAE Fraser, 1957, *A reclassification of the order Odonata*, p. 49.

Liocheles Sundevall, 1833, *Conspectus Arachnidum*, p. 31.

LIOCHELIDAE Fet & Bechly, 2001 (1879), *BZN* **58**: 281.

The following is the reference for the subsequent designation of *Agrion elegans* Van der Linden, 1823 as the type species of *Ischnura* Charpentier, 1840:

Selys-Longchamps, M.E. de. 1850. *Mémoires de la Société des Sciences de Liège*, vol. 6, p. 182.

OPINION 2038 (Case 3155)**MACROTERMITINAE Kemner, 1934 (Insecta, Isoptera): given precedence over ACANTHOTERMITINAE Sjöstedt, 1926**

Abstract. The Commission has ruled that the family-group name MACROTERMITINAE is given precedence over ACANTHOTERMITINAE. Usage of the family-group name MACROTERMITINAE Kemner, 1934 (type genus *Macrotermes* Holmgren, 1909) for a well known and important group of fungus-growing termites is thus conserved. The senior subfamily name ACANTHOTERMITINAE Sjöstedt, 1926 (type genus *Acanthotermes* Sjöstedt, 1900) has been used only once since its establishment 77 years ago, and then for a tribe within MACROTERMITINAE not including *Macrotermes*.

Keywords. Nomenclature; taxonomy; Isoptera; TERMITIDAE; MACROTERMITINAE; ACANTHOTERMITINAE; *Macrotermes*; *Acanthotermes*; termites.

Ruling

- (1) Under the plenary power it is hereby ruled that the family-group name MACROTERMITINAE Kemner, 1934 and other family-group names based on *Macrotermes* Holmgren, 1909 are to be given precedence over ACANTHOTERMITINAE Sjöstedt, 1926 and other family-group names based on *Acanthotermes* Sjöstedt, 1900 whenever their type genera are placed in the same family-group taxon.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Macrotermes* Holmgren, 1909 (gender: masculine), type species by monotypy *Termes lilljeborgi* Sjöstedt, 1896;
 - (b) *Acanthotermes* Sjöstedt, 1900 (gender: masculine), type species by subsequent designation by Sjöstedt (1926) *Termes acanthothorax* Sjöstedt, 1898.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *lilljeborgi* Sjöstedt, 1896, as published in the binomen *Termes lilljeborgi* (specific name of the type species of *Macrotermes* Holmgren, 1909);
 - (b) *acanthothorax* Sjöstedt, 1898, as published in the binomen *Termes acanthothorax* (specific name of the type species of *Acanthotermes* Sjöstedt, 1900).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) MACROTERMITINAE Kemner, 1934 (type genus *Macrotermes* Holmgren, 1909), with the endorsement that it and other family-group names based on *Macrotermes* are to be given precedence over ACANTHOTERMITINAE Sjöstedt, 1926 and other family-group names based on *Acanthotermes* Sjöstedt, 1900 whenever their type genera are placed in the same family-group taxon;
 - (b) ACANTHOTERMITINAE Sjöstedt, 1926 (type genus *Acanthotermes* Sjöstedt, 1900), with the endorsement that it and other family-group names based on

Acanthotermes are not to be given priority over MACROTERMITINAE Kemner, 1934 and other family-group names based on *Macrotermes* Holmgren, 1909 whenever their type genera are placed in the same family-group taxon.

History of Case 3155

An application to conserve the usage of the family-group name MACROTERMITINAE Kemner, 1934 (type genus *Macrotermes* Holmgren, 1909) for a well known and important group of fungus-growing termites, by giving it precedence over the senior subfamily name ACANTHOTERMITINAE Sjöstedt, 1926, was received from Michael S. Engel (*Division of Entomology, Snow Hall, Lawrence, Kansas, U.S.A.*) and Kumar Krishna (*Division of Invertebrate Zoology, American Museum of Natural History, New York, N.Y., U.S.A.*) on 27 March 2000. After correspondence the case was published in BZN **58**: 206–209 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN **58**: 207–208. At the close of the voting period on 1 March 2003 the votes were as follows: 21 Commissioners voted FOR the proposals, 3 Commissioners (Alonso-Zarazaga, Lamas and Minelli) voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- Acanthotermes* Sjöstedt, 1900, *Entomologisk Tidskrift*, **20**: 278.
ACANTHOTERMITINAE Sjöstedt, 1926, *Kungliga Svenska Vetenskapsakademiens Handlingar*, (3)**3**(1): 8, 60.
acanthothorax, *Termes*, Sjöstedt, 1898, *Entomologisk Tidskrift*, **19**: 204.
lilljeborgi, *Termes*, Sjöstedt, 1896, *Festskrift för Lilljeborg*, p. 269.
Macrotermes Holmgren, 1909, *Kungliga Svenska Vetenskapsakademiens Handlingar*, (2)**44**(3): 193.
MACROTERMITINAE Kemner, 1934, *Kungliga Svenska Vetenskapsakademiens Handlingar*, (3)**13**(4): 69.

The following is the reference for the designation of *Termes acanthothorax* Sjöstedt, 1898 as the type species of the nominal genus *Acanthotermes* Sjöstedt, 1900:

- Sjöstedt, Y.** 1926, *Kungliga Svenska Vetenskapsakademiens Handlingar*, (3)**3**(1): 60.

OPINION 2039 (Case 3159)***Staphylinus maculosus* and *S. violaceus* Gravenhorst, 1802 (currently *Platydracus maculosus* and *P. violaceus*; Insecta, Coleoptera): usage of the specific names conserved**

Abstract. The Commission has ruled (1) that the widely used staphylinid name *Platydracus maculosus* (Gravenhorst, 1802) is conserved by suppressing its senior subjective synonym *Staphylinus viduatus* Fabricius, 1801, which has been used only once in the past 160 years, and (2) that the specific name of *Platydracus violaceus* (Gravenhorst, 1802) is not invalid by reason of being a junior primary homonym of *Staphylinus violaceus* Olivier, 1795.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Platydracus*; *Platydracus maculosus*; *Platydracus violaceus*; rove beetles.

Ruling

- (1) Under the plenary power it is ruled that:
 - (a) the name *viduatus* Fabricius, 1801, as published in the binomen *Staphylinus viduatus*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) the name *violaceus* Gravenhorst, 1802, as published in the binomen *Staphylinus violaceus*, is not invalid by reason of being a junior primary homonym of *Staphylinus violaceus* Olivier, 1795.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *maculosus* Gravenhorst, 1802, as published in the binomen *Staphylinus maculosus*;
 - (b) *violaceus* Gravenhorst, 1802,* as published in the binomen *Staphylinus violaceus* (not invalid by the ruling in (1)(b) above).
- (3) The name *viduatus* Fabricius, 1801, as published in the binomen *Staphylinus viduatus* and as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3159

An application to (1) conserve the widely used staphylinid name *Staphylinus maculosus* Gravenhorst, 1802 by suppression of its senior subjective synonym *Staphylinus viduatus* Fabricius, 1801 and (2) to conserve the specific name of *Staphylinus violaceus* Gravenhorst, 1802 was received from A.F. Newton (*Field Museum of Natural History, South Lake Shore Drive, Chicago, Illinois, U.S.A.*) on 8 May 2000. After correspondence the case was published in BZN 58: 210–214 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 212–213. At the close of the voting period on 1 March 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Štys abstained, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

- maculosus*, *Staphylinus*, Gravenhorst, 1802, *Coleoptera Microptera Brunsvicensia*, p. 165.
viduatus, *Staphylinus*, Fabricius, 1801, *Systema Eleutheratorum* . . . , vol. 2, p. 591.
violaceus, *Staphylinus*, Gravenhorst, 1802, *Coleoptera Microptera Brunsvicensia*, p. 162.

OPINION 2040 (Case 3190)***Chlorops meigenii* Loew, 1866 (Insecta, Diptera): specific name conserved**

Abstract. The Commission has ruled that the name of the Palaearctic grassfly *Chlorops meigenii* Loew, 1866 (family CHLOROPIDAE) is not invalid by reason of being a junior primary homonym of *Chlorops meigenii* Fallén, 1823. Fallén's name has been treated as a junior synonym of *Cerodontha denticornis* (Panzer, 1806; AGROMYZIDAE) since 1830 and the case was referred to the Commission under Article 23.9.5 of the Code.

Keywords. Nomenclature; taxonomy; Diptera; CHLOROPIDAE; *Chlorops*; *Chlorops meigenii*; grassflies; Palaearctic.

Ruling

- (1) Under the plenary power it is hereby ruled that the specific name of *Chlorops meigenii* Loew, 1866 is not invalid by reason of being a junior primary homonym of *Chlorops meigenii* Fallén, 1823.
- (2) The name *meigenii* Loew, 1866, as published in the binomen *Chlorops meigenii*, is hereby placed on the Official List of Specific Names in Zoology (ruled in (1) above not invalid by reason of being a junior primary homonym of *C. meigenii* Fallén, 1823).

History of Case 3190

An application for the conservation of the name of the Palaearctic grassfly *Chlorops meigenii* Loew, 1866 (family CHLOROPIDAE) was received from Emilia P. Nartshuk (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*) on 29 January 2001. After correspondence the case was published in **BZN 58**: 286–287 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. A comment in support of the application was published in **BZN 59**: 204–205.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in **BZN 58**: 286–287. At the close of the voting period on 1 March 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

meigenii, *Chlorops*, Loew, 1866, *Zeitschrift für Entomologie* (Breslau), **20**: 43.

OPINION 2041 (Case 3081)***Alucita ochrodactyla* Denis & Schiffermüller, 1775 (currently *Gillmeria* or *Platyptilia ochrodactyla*; Insecta, Lepidoptera): specific name conserved by the designation of a neotype for *Phalaena tetradactyla* Linnaeus, 1758**

Abstract. The Commission has designated the lectotype of *Phalaena tridactyla* Linnaeus, 1758 (currently *Merrifieldia tridactyla*) as neotype for the European plume moth *P. tetradactyla* Linnaeus, 1758 (family PTEROPHORIDAE) conserving the specific name of *Gillmeria* (or *Platyptilia*) *ochrodactyla* (Denis & Schiffermüller, 1775) and eliminating the confused application of the name *tetradactyla* to more than one species.

Keywords. Nomenclature; taxonomy; Lepidoptera; Microlepidoptera; PTEROPHORIDAE; *Gillmeria ochrodactyla*; *Platyptilia ochrodactyla*; *Phalaena* (currently *Merrifieldia tridactyla*); *Alucita* (currently *Merrifieldia leucodactyla*); plume moths.

Ruling

- (1) Under the plenary power all previous type fixations for the nominal species *Phalaena tetradactyla* Linnaeus, 1758 are hereby set aside and the lectotype of *P. tridactyla* Linnaeus, 1758 designated by Robinson & Nielsen (1983) is designated as the neotype.
- (2) The name *Phalaena tridactyla* Linnaeus, 1758, as defined by the neotype designated in (1) above, is given precedence over the name *P. tetradactyla* Linnaeus, 1758 (an objective synonym by the ruling in (1) above).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *tridactyla* Linnaeus, 1758, as published in the binomen *Phalaena tridactyla* and as defined by the lectotype designated by Robinson & Nielsen (1983);
 - (b) *ochrodactyla* Denis & Schiffermüller, 1775, as published in the binomen *Alucita ochrodactyla*;
 - (c) *leucodactyla* Denis & Schiffermüller, 1775, as published in the binomen *Alucita leucodactyla* and as defined by the neotype designated by Arenberger (1985).
- (4) The name *tetradactyla* Linnaeus, 1758, as published in the binomen *Phalaena tetradactyla* and as defined by the neotype designated in (1) above (a junior objective synonym of *P. tridactyla* Linnaeus, 1758 by the precedence ruled in (2) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3081

An application for the conservation of the specific name of *Gillmeria* (or *Platyptilia*) *ochrodactyla* (Denis & Schiffermüller, 1775) by the designation of a neotype for *Phalaena tetradactyla* Linnaeus, 1758 was received from D.J.L. Agassiz

(*The Natural History Museum, Cromwell Road, London*) on 10 June 1998. After correspondence the case was published in BZN **58**: 282–285 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN **58**: 284. At the close of the voting period on 1 March 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

leucodactyla, *Alucita*, Denis & Schiffermüller, 1775, *Ankündigung eines systematisches Werkes von den Schmetterlinge der Wiener Gegend*, p. 146.

ochrodactyla, *Alucita*, Denis & Schiffermüller, 1775, *Ankündigung eines systematisches Werkes von den Schmetterlinge der Wiener Gegend*, p. 145.

tetradactyla, *Phalaena*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 542.

tridactyla, *Phalaena*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 542.

The following is the reference for the designation of the lectotype of *Phalaena tridactyla* Linnaeus, 1758:

Robinson, G. S. & Nielsen, E. S. 1983. *Systematic Entomology*, **8**: 234.

The following is the reference for the designation of the neotype of *Alucita leucodactyla* Denis & Schiffermüller, 1775:

Arenberger, E. 1985. *Entomologische Zeitschrift*, **95**(17): 245.

OPINION 2042 (Case 3160)***Dianulites petropolitana* Dybowski, 1877 and *Diplotrypa petropolitana* Nicholson, 1879 (Bryozoa): conserved**

Abstract. The Commission has ruled that the specific names of *Dianulites petropolitana* Dybowski, 1877 and *Diplotrypa petropolitana* Nicholson, 1879, used for two Ordovician trepostome bryozoans, are conserved. The name *Favosites petropolitana* Pander, 1830, now recognized as having been used for a single or several indeterminable bryozoans, is suppressed.

Keywords. Nomenclature; taxonomy; Bryozoa; Trepostomata; Ordovician; *Dianulites*; *Diplotrypa*; *Dianulites petropolitana*; *Diplotrypa petropolitana*.

Ruling

- (1) Under the plenary power it is ruled that:
 - (a) the name *petropolitana* Pander, 1830, as published in the binomen *Favosites petropolitana*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) the following specific names are hereby deemed to be those of then new nominal species:
 - (i) *petropolitana* Dybowski, 1877, as published in the binomen *Dianulites petropolitana*;
 - (ii) *petropolitana* Nicholson, 1879, as published in the binomen *Diplotrypa petropolitana*;
 - (c) all previous fixations of type species for the nominal genus *Diplotrypa* Nicholson, 1879 are hereby set aside and *Diplotrypa petropolitana* Nicholson, 1879 is designated as the type species.
- (2) The name *Diplotrypa* Nicholson, 1879 (gender: feminine), type species by designation under the plenary power in (1)(c) above *Diplotrypa petropolitana* Nicholson, 1879, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names, deemed to be then new nominal species as ruled under the plenary power (1)(b) above, are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *petropolitana* Dybowski, 1877, as published in the binomen *Dianulites petropolitana*;
 - (b) *petropolitana* Nicholson, 1879; as published in the binomen *Diplotrypa petropolitana* and as defined by the lectotype designated in BZN 58: 217;
- (4) The name *petropolitana* Pander, 1830, as published in the binomen *Favosites petropolitana* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3160

An application to conserve the specific names of *Dianulites petropolitana* Dybowski, 1877 and *Diplotrypa petropolitana* Nicholson, 1879 for two Ordovician

trepostome bryozoans was received from Patrick N. Wyse Jackson (*Department of Geology, Trinity College, Dublin, Ireland*), Caroline J. Buttler (*Department of Geology, National Museums and Galleries of Wales, Cardiff, Wales, U.K.*) and Marcus M. Key, Jr. (*Department of Geology, Dickinson College, Carlisle, Pennsylvania, U.S.A.*) on 20 July 2000. After correspondence the case was published in *BZN* **58**: 215–219 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. A comment opposing the application was published in *BZN* **59**: 40–42. The authors' response to this comment was published in *BZN* **59**: 42–44, together with a comment supporting the application.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in *BZN* **58**: 217–218. At the close of the voting period on 1 March 2003 the votes were as follows: 19 Commissioners voted FOR the proposals, 5 Commissioners (Alonso-Zarazaga, Macpherson, Minelli, Rosenberg and Štys) voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- Diplotrypa* Nicholson, 1879, *On the Structure and Affinities of the 'Tabulate Corals' of the Palaeozoic Period with critical descriptions of illustrative species*, p. 312.
petropolitana, *Dianulites*, Dybowski, 1877, *Die Chaetetiden der Ostbaltischen Silur-Formation*, p. 24.
petropolitana, *Diplotrypa*, Nicholson, 1879, *On the Structure and Affinities of the 'Tabulate Corals' of the Palaeozoic Period with critical descriptions of illustrative species*, p. 313.
petropolitana, *Favosites*, Pander, 1830, *Beiträge zur Geognosie des Russischen Reiches*, p. 105.

The following is the reference for the designation of the lectotype of *Diplotrypa petropolitana* Nicholson, 1879:

Wyse Jackson, P.N., Buttler, C.J. & Key, M.M., Jr. 2001. *BZN* **58**: 217.

OPINION 2043 (Case 3113)***Betta* Bleeker, 1850 (Osteichthyes, Perciformes): specific names conserved by the suppression of the generic and specific names *Micrakanthus marcheii* Sauvage, 1879**

Abstract. The Commission has ruled that the specific names of the Southeast Asian 'fighting fishes' that belong to the genus *Betta* Bleeker, 1850 (family OSPHRONEMIDAE) are conserved by the suppression of the unused generic and specific names *Micrakanthus marcheii* Sauvage, 1879.

Keywords. Nomenclature; taxonomy; Osteichthyes; Perciformes; OSPHRONEMIDAE; *Betta*; *Micrakanthus*; *Betta splendens*; *Betta smaragdina*; *Betta imbellis*; *Micrakanthus marcheii*; fighting fishes; Southeast Asia.

Ruling

- (1) Under the plenary power the generic and specific names of *Micrakanthus marcheii* Sauvage, 1879 are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Micrakanthus* Sauvage, 1879 (gender: masculine), as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- (3) The name *marcheii* Sauvage, 1879, as published in the binomen *Micrakanthus marcheii* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3113

An application to conserve the specific names of the Southeast Asian 'fighting fishes' which belong to the genus *Betta* Bleeker, 1850 (family OSPHRONEMIDAE), by the suppression of the unused name *Micrakanthus marcheii* Sauvage, 1879, was received from H.H. Tan and Peter K.L. Ng (*Department of Biological Sciences, National University of Singapore, Singapore, Republic of Singapore*) on 16 January 1999. After correspondence the case was published in BZN 57: 29–31 (March 2000). Notice of the case was sent to appropriate journals. No comments on this case were received.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN 57: 30. At the close of the voting period on 1 March 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, 1 Commissioner (Rosenberg) voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Voting against, Rosenberg commented: '*Micrakanthus marcheii* is a nomen dubium. If at some point DNA or other technology allows positive identification of the species, and it proves to be a senior synonym of a known species, the merits of

suppressing the name can be evaluated. Only four publications using the possibly junior synonyms from the 1970s are cited, so the earlier name seems to pose no great threat to stability'.

Original references

The following are the original references to the names placed on Official Indexes by the ruling given in the present Opinion:

Micracanthus Sauvage, 1879, *Bulletin de la Société Philomathique de Paris*, (7)3: 95.

marchei, *Micracanthus*, Sauvage, 1879, *Bulletin de la Société Philomathique de Paris*, (7)3: 96.

OPINION 2044 (Case 3172)***Leptodactylus chaquensis* Cei, 1950 (Amphibia, Anura): specific name conserved**

Abstract. The Commission has ruled that the specific name of *Leptodactylus chaquensis* Cei, 1950, a subtropical South American frog, is conserved. The specific name was threatened by the senior synonym *L. typicus* Cei, 1948, available under Article 45.6.4 of the Code. The name *L. typica* was applied in 1948 to what was then supposed to be a 'forma' of *L. ocellatus* Linnaeus, 1758, but has never been used and is now suppressed.

Keywords. Nomenclature; taxonomy; Anura; LEPTODACTYLIDAE; *Leptodactylus*; *Leptodactylus chaquensis*; *Leptodactylus ocellatus*; frogs; South America.

Ruling

- (1) Under the plenary power the name *typica* Cei, 1948, as published in the combination *Leptodactylus ocellatus* forma *typica*, is suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *chaquensis* Cei, 1950, as published in the binomen *Leptodactylus chaquensis*, is hereby placed on the Official List of Specific Names in Zoology.
- (3) The name *typica* Cei, 1948, as published in the combination *Leptodactylus ocellatus* forma *typica* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3172

An application to conserve the widely used name *Leptodactylus chaquensis* Cei, 1950 for a subtropical South American frog by suppression of the name *L. typicus* Cei, 1948 was received from José M. Cei (*Departamento Ciencias Naturales, Universidad Nacional de Rio Cuarto, Rio Cuarto, Córdoba, Argentina*) on 31 August 2000. After correspondence the case was published in BZN 58: 116–118. The title, abstract and keywords of the case were published on the Commission's website. A comment in support of the application was published in BZN 59: 44–45.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 117. At the close of the voting period on 1 March 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

chaquensis, *Leptodactylus*, Cei, 1950, *Acta Zoologica Lilloana*, **9**: 417.
typica, *Leptodactylus ocellatus* 'forma', Cei, 1948, *Acta Zoologica Lilloana*, **6**: 308.

OPINION 2045 (Case 3165)***Parasuchus hislopi* Lydekker, 1885 (Reptilia, Archosauria): lectotype replaced by a neotype**

Abstract. The Commission has set aside the lectotype for the well known crocodile-like archosaurian (phytosaur or parasuchid) *Parasuchus hislopi* Lydekker, 1885 (Reptilia, Archosauria) from the Late Triassic Maleri Formation of India and designated the complete articulated skeleton ISIR 42 in the Geological Museum of the Indian Statistical Institute, Calcutta, India, as the neotype.

Keywords. Nomenclature; taxonomy; Archosauria; PARASUCHIDAE; PHYTOSAURIDAE; *Parasuchus*; *Paleorhinus*; *Parasuchus hislopi*; archosaurs; parasuchids; phytosaurs; Triassic.

Ruling

- (1) Under the plenary power all previous fixations of name-bearing types for the nominal species *Parasuchus hislopi* Lydekker, 1885 are set aside and the articulated skeleton ISIR 42 in the Geological Museum of the Indian Statistical Institute, Calcutta, India, is designated as the neotype.
- (2) The name *Parasuchus* Lydekker, 1885 (gender: masculine), type species by monotypy *Parasuchus hislopi* Lydekker, 1885, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *hislopi* Lydekker, 1885, as published in the binomen *Parasuchus hislopi* and as defined by the neotype designated in (1) above (specific name of the type species of *Parasuchus* Lydekker, 1885), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3165

An application to replace the lectotype of the well known crocodile-like archosaurian (phytosaur or parasuchid) *Parasuchus hislopi* Lydekker, 1885 (Reptilia, Archosauria) from the Late Triassic Maleri Formation of India by the designation of the complete articulated skeleton ISIR 42 in the Geological Museum of the Indian Statistical Institute, Calcutta, India, as the neotype was received from Sankar Chatterjee (*Museum of TexasTech University, Lubbock, Texas, U.S.A.*) on 23 May 2000. After correspondence the case was published in *BZN* 58: 34–36 (March 2001). The title, abstract and keywords of the case were published on the Commission's website. A comment in support of the application was published in *BZN* 58: 228–229.

Decision of the Commission

On 1 December 2002 the members of the Commission were invited to vote on the proposals published in *BZN* 58: 35. At the close of the voting period on 1 March 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Kerzhner abstained, no vote was received from Mahnert, Ng was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Parasuchus Lydekker, 1885, *Palaeontologia Indica*, (4)1(5): 22.

hislopi, *Parasuchus*, Lydekker, 1885, *Palaeontologia Indica*, (4)1(5): 23.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the *Bulletin*; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described . . .'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in *BZN* 59: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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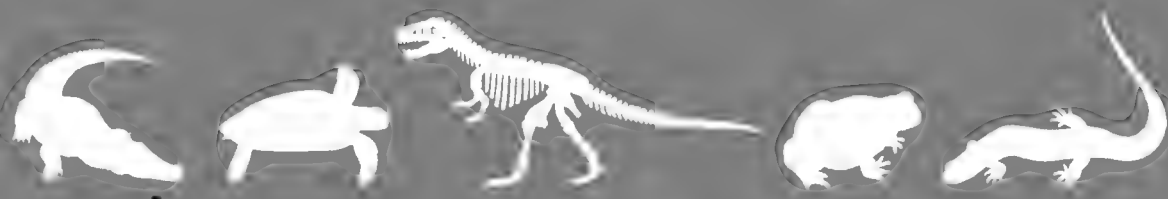
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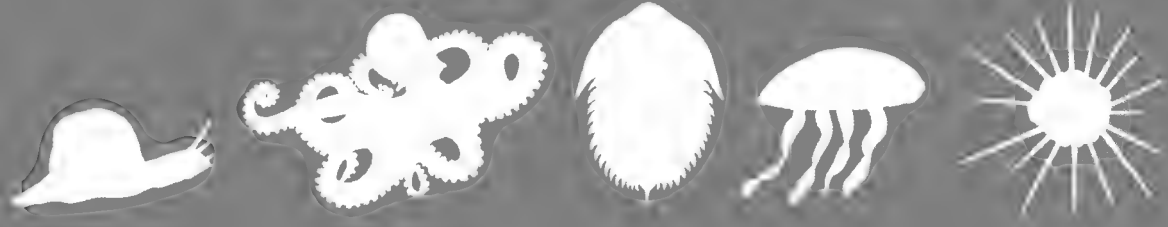
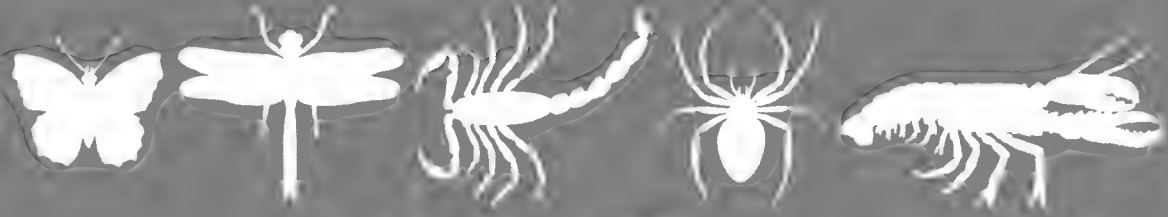
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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to iczn@nhm.ac.uk where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to join-iczn-list@lyris.bishopmuseum.org, leaving the subject line and body of the message blank (for further details see BZN 59: 234).

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 60, part 2, 30 June 2003) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3278: *Mus laniger* Molina, 1782 and *Eriomys chinchilla* Lichtenstein, 1830 (currently *Chinchilla lanigera* and *C. chinchilla*; Mammalia, Rodentia): proposed conservation of the specific names. Authors: J.P. Valladares & Angel Spotorno O. (Chile).

CASE 3279: *Curculio picipes* Marsham, 1802 (currently *Procas picipes*; Insecta, Coleoptera): proposed conservation of the specific name. Author: R.T. Thompson (U.K.).

CASE 3280: *Melitaea nycteis* Doubleday, 1847 (currently *Chlosyne hyceteis*; Insecta, Lepidoptera): proposed conservation of the specific name by designation of a neotype for *Melitaea ismeria* Boisduval & Le Conte, 1833. Authors: J.V. Calhoun, L.D. Miller & J.Y. Miller (U.S.A.).

CASE 3281: *Nahecaris* Jaekel, 1921 (Malacostraca, Phyllocarida, Archaeostraca): proposed precedence over *Dilophaspis* Traquair in Walther, 1903. Authors: D.E.G. Briggs & C. Bartels (U.S.A. & Germany).

CASE 3282: *Thecla azia* Hewitson, 1873 (Insecta, Lepidoptera): proposed conservation of the specific name. Authors: R.K. Robbins & G. Lamas (U.S.A. & Peru).

CASE 3283: *Cetonia albopicta* Gory & Percheron, 1833 (currently *Trichostetha albopicta*) and *Cetonia albopicta* Motschulsky, 1845 (currently *Oxythyrea albopicta*; Insecta, Coleoptera): proposed conservation of the specific names. Author: F.-T. Krell (U.K.).

CASE 3284: *Alpheus laeviusculus* Lockington, 1878 (Crustacea, Decapoda): proposed suppression of the specific name. Author: M.K. Wicksten (U.S.A.).

CASE 3285: *Pemphigus* Hartig, 1839 (Insecta, Hemiptera): proposed precedence over *Rhizobius* Burmeister, 1835. Authors: J.M. Nieto Nafria, N. Pérez Hidalgo & M.A. Alonso-Zarazaga (Spain).

CASE 3286: *Thinobius crinifer* Smetana, 1959 (Insecta, Coleoptera): proposed conservation of the specific name. Author: M. Schülke (Germany).

CASE 3287: LABIIDAE Burr, 1909 (Insecta, Dermoptera): proposed precedence over ISOLABELLINAE Verhoeff, 1902. Author: M.S. Engel (U.S.A.).

CASE 3288: *Nicrophorus tomentosus* Weber, 1801 (Insecta, Coleoptera): proposed conservation of the specific name. Authors: D.S. Sikes & S.T. Trumbo (U.S.A.).

CASE 3289: *Emphania* Erichson, 1847 (Insecta, Coleoptera): proposed conservation of usage by designation of *E. chloris* Burmeister, 1855 as the type species. Author: D. Ahrens (Germany).

CASE 3290: *Platystrophia* King, 1850 (Brachiopoda): proposed conservation, and *Porambonites costatus* Pander, 1830 (currently *Platystrophia costata*): proposed designation as the type species of *Platystrophia* with designation of a neotype. Authors: M.A. Zuykov & D.A.T. Harper (Russia & Denmark).

CASE 3292: *Nasutitermes* Dudley, 1890, *Microcerotermes* Silvestri, 1901 and NASUTITERMITINAE Hare, 1937 (Insecta, Isoptera): proposed conservation. Authors: M.S. Engel & K. Krishna (U.S.A.).

CASE 3293: *Nicrophorus olidus* Matthews, 1888 (Insecta, Coleoptera): proposed precedence over *Nicrophorus quadricollis* Gistel, 1848. Authors: D.S. Sikes & S.T. Trumbo (U.S.A.).

CASE 3294: *Triacanthagyna* Selys, 1883 and *Gynacantha* Rambur, 1842 (Insecta, Odonata): proposed conservation and designation of *Gynacantha nervosa* Rambur, 1842 as the type species. Authors: N. von Ellenrieder & R.W. Garrison (U.S.A.).

CASE 3295: *Eterusia cingala* Moore, 1977 (Insecta, Lepidoptera): proposed conservation of the specific name. Author: S.-H. Yen (U.K.).

The International Commission on Zoological Nomenclature

The aim of the Commission is to bring stability to the use of animal names (zoological nomenclature). The Commission does this by:

(a) producing, publishing and periodically revising the *International Code of Zoological Nomenclature* (the Code), which deals with the formulation and use of animal names;

(b) considering and ruling on specific cases of nomenclatural uncertainty and dispute about animal names that are not automatically resolved under the provisions of the Code, via applications published in the *Bulletin of Zoological Nomenclature*.

The International Congress of Zoology founded the Commission in 1895. At present, the Commission consists of 25 zoologists from 20 countries whose interests cover most of the main divisions, including fossil animals (palaeontology), of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS). Commission members are elected by the vote of zoologists attending General Assemblies of the IUBS or other appropriate congresses. Nominations for membership may be sent to the Executive Secretary at any time. The Commission's history is described in *Towards Stability in the Names of Animals* (1995). See below under 'Publications' for details. Further discussion of the Commission's activities can be found in BZN 48: 295-299 (December 1991) and BZN 60: supplement pp. 1-12 (March 2003).

The International Trust for Zoological Nomenclature

The International Trust for Zoological Nomenclature (the Trust) was founded to manage the Commission's financial matters in 1947. It is a registered charity, based in the U.K. (No. 211944). At present, the Trust consists of 30 members from 14 countries. Discussion of the Trust's activities can be found in BZN 60: supplement pp. 1-12 (March 2003).

The International Code of Zoological Nomenclature

The aim of the Code is to provide the greatest universality and continuity in the scientific names of animals without restricting the taxonomy or classification of the animals for which the names are used. The current (fourth edition) of the Code was published by the Trust in 1999, and came into effect on 1 January 2000. This edition supersedes all previous editions and official texts are available in English, Chinese (traditional), French, German, Japanese, Russian, Spanish and Ukrainian. Other translations (including Czech and Catalan) are in preparation. See below under 'Publications' for sales details.

The Articles of the Code enable the user to decide the valid name for any animal taxon between and including subspecies and superfamily. The provisions of the Code can be waived or modified in particular cases where strict adherence would cause confusion. However, only the Commission, acting on behalf of all

zoologists, can do this in response to formal applications that are published in the *Bulletin*.

The Bulletin of Zoological Nomenclature

The *Bulletin* is published four times each year. The *Bulletin* includes applications relating to animal names, comments on applications and the Commission's eventual rulings based on the Commissioners' votes (these are referred to as Opinions). Each Opinion published in the *Bulletin* is an official ruling of the Commission and comes into effect on the day of publication of the *Bulletin*. The Opinions are summarised in the *Official Lists and Indexes of Names and Works in Zoology*. The *Bulletin* also includes discussion papers on proposed emendations to the Code. See below under 'Publications' for how to subscribe to the *Bulletin* and for details about the *Official Lists and Indexes of Names and Works in Zoology*.

The Commission's website

Abstracts of applications and Opinions, and a record of the names included in the *Official Lists and Indexes of Names and Works in Zoology*, are posted on the Commission's website (www.iczn.org). It is planned for this website to be extensively revised in the near future.

Publications

All publications listed below may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk). With the exception of the *Bulletin* (which can only be ordered from ITZN), these publications can also be ordered from the American Association for Zoological Nomenclature (AAZN), Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: smith.davidg@nsmnh.si.edu). Prices listed below include surface postage. Please add £2 or \$3 if you require postage by Airmail. Please send payment with orders. Cheques should be made out to 'ITZN' (in sterling or dollars) or to 'AAZN' (in dollars only). Visa or MasterCard payments can be made to ITZN (but not AAZN). Please give cardholder's name, address, card number and card expiry date when ordering.

The *Bulletin* subscription for 2003 is £123 or US\$220, including postage by accelerated surface post. Individual subscribers for personal use have a 50% discount making the subscription £61 or US\$110.

The *International Code of Zoological Nomenclature* (4th Edition, 1999; ISBN 0 85301 006 4; English and French in one volume) is available at £40 or US\$65, including surface postage. Individual purchasers who are buying the Code for personal use are offered a 25% discount (£30 or US\$48), as are institutions or agents buying five or more copies. Individual members of the American or European Associations for Zoological Nomenclature are offered a discount of 40% (price \$39

or £24). Information about the prices and availability of the authorised translations of the Code can be obtained from the following e-mail addresses:

Chinese (traditional) — wenhua@oceantaiwan.com

German — books@insecta.de

Japanese — tomokuni@kahaku.go.jp

Russian — kim@ik3599.spb.edu

Spanish — mcnaz39@mncn.csic.es

Ukrainian — ypnekut@mbat.freenet.kiev.ua

The *Official Lists and Indexes of Names and Works in Zoology* gives details of all the names and publications on which the Commission has ruled since it was set up in 1895. The first volume published in 1987 contains 9917 entries, and a Supplement (2001) lists an additional 2385 entries. The cost of the 1987 volume and of the Supplement is £60 or US\$110 each, with reductions for both volumes ordered together and for individual buyers for personal use. Details available on request.

Towards Stability in the Names of Animals – a History of the International Commission on Zoological Nomenclature 1895–1995 was published in 1995 in recognition of ICZN's Centenary. This book (104 pages) contains 18 full-page illustrations, 14 being of eminent zoologists who played a crucial part in the development of animal nomenclature. The cost is £30 or US\$50.

Funding appeal

The Convention on Biological Diversity was adopted in Rio (1992) and its objectives were reinforced in Johannesburg (2002). As a result, international, regional, and local governments now recognise the need to underpin their sustainability policies with inventories of current biological diversity. About 2 million of the earth's living-organisms have been formally named since the time of Linnaeus. By the best estimates, over 13 million others remain to be described and named. This massive task will rely on expanded IT capabilities, and the development of new IT-based systems and procedures.

The Commission will be a key player in these initiatives. With the new urgency to identify and catalogue life on earth, the Commission's continuing task will be to provide the secure animal naming system that underpins zoological taxonomy, biodiversity science, and all other applications of zoological taxonomy. The Commission must now invest in skilled staff and the necessary computer equipment to fulfil its unique responsibilities and keep pace with emerging IT-based identification and naming practices.

The Trust seeks to establish an endowment fund to provide lasting financial security for the Commission's vital work. The appeal was formally launched at the 20th Pacific Science Congress in Bangkok, 17–21 March 2003. The appeal is now being extended worldwide. Accompanying the March 2003 issue of the *Bulletin* was a supplement (BZN 60: supplement pp. 1–12; March 2003) and a leaflet outlining the background to and aims of the appeal. Further copies of both documents are available from the Executive Secretary. The Trust urges all those with the necessary resources to assist in the establishment of an endowment fund that will ensure the continuation and development of the Commission's essential work. All levels of support are greatly appreciated and make an impact.

Case 3245***Hastigerinella* Cushman, 1927 and *Clavigerinella* Bolli, Loeblich & Tappan, 1957 (Rhizopoda, Foraminiferida): proposed conservation of the usage by designation of *Hastigerina digitata* Rhumbler, 1911 as the type species of *Hastigerinella***

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Abstract. The purpose of this application, in relation to Articles 11.10, 49 and 67.13 of the Code, is to conserve the widespread usage of the generic names *Hastigerinella* Cushman, 1927 for a group of extant planktonic foraminifera and *Clavigerinella* Bolli, Loeblich & Tappan, 1957 for a group of fossil foraminifera by designating *Hastigerina digitata* Rhumbler, 1911 as the type species of *Hastigerinella*. Rhumbler (1911) had, by misidentification, used the specific name of *Globigerina digitata* Brady, 1879 for his taxon. As a result of this misuse of the name, some authors have argued that *Hastigerinella eocanica* Nuttall, 1928 is the valid type species of *Hastigerinella*. However, acceptance of this view would confuse the accepted meaning of *Hastigerinella* and *Clavigerinella*.

Keywords. Nomenclature; taxonomy; Foraminifera; HASTIGERININAE; *Hastigerinella*; *Clavigerinella*; *Hastigerina digitata*; *Clavigerinella akersi*.

1. In 1879 (p. 599), Henry Brady described the living planktonic foraminiferal species *Globigerina digitata* collected during the H.M.S. *Challenger* Expedition. Although no illustrations were included with the original description, accurate illustrations of *G. digitata* showing its distinctive finger-like (digitate) final chambers were presented in a later report (Brady, 1884, pl. 80, figs. 6–10; pl. 82, figs. 6, 7). The illustrations included two different digitate morphotypes, which are now widely regarded as being distinct species. These are now referred to as *Globigerina digitata* Brady, 1879 (currently *Beella digitata*) (see Brady, 1884, pl. 80, figs. 6–10) and *Globigerinella adamsi* (Banner & Blow, 1959) (p. 13) (see Brady, 1884, pl. 82, figs. 6, 7).

2. In 1895 Ludwig Rhumbler (p. 94) published a taxonomic revision in which he transferred the nominal species *Globigerina digitata* Brady, 1879 to the genus *Hastigerina* Thompson, 1876 (p. 534). *Hastigerina* (type species *Hastigerina pelagica* (d'Orbigny, 1839) (p. 27)) has a very different shell wall structure to all other planktonic foraminifera and *H. digitata* Rhumbler is one of the few other described species that exhibits the same unusual wall texture. In 1911 (pp. 163, 202), Rhumbler described and illustrated living foraminifera collected during the Humboldt Plankton-Expedition, including *Hastigerina digitata*. He did not cite any authorship of the name *digitata*. A copy of unpublished plate explanations for Rhumbler's 1911

work was presented as an anonymous note in an edition of *The Micropaleontologist* (Anonymous, 1949), copied from an original manuscript held in the library of the Zoological Institute, University of Göttingen, Germany, by Dr Otto Wetzel. This material indicated that Rhumbler considered his forms to be two new varieties of *Hastigerina digitata* (Brady, 1879). Another copy of the manuscript, which was presented to Edward Heron-Allen in 1928 by Rhumbler himself, is held in the Heron-Allen Library at The Natural History Museum, London. I have examined this manuscript and can confirm that Rhumbler had intended to use Brady's name *Hastigerina digitata*. However, Rhumbler's figured fossil specimens show a different shell ultrastructure to those of Brady's living specimens. In fact, *H. digitata* sensu Rhumbler, 1911 represents a digitate homeomorph that is closely related to the Recent species *Hastigerina pelagica* (d'Orbigny, 1839) and is clearly unrelated to *Beella digitata* (Brady, 1879). It is evident that Rhumbler (1911) misapplied Brady's name *digitata*.

3. In 1927 (p. 87), Cushman established the genus *Hastigerinella* and designated *Hastigerina digitata* Rhumbler, 1911 as the type species (he used the incorrect spelling '*Hasterigerina*' *digitata* in the type species designation). Many workers have since based their concepts of the genus on this definition (e.g. Bolli, Loeblich & Tappan, 1957; Bradshaw, 1959; Banner & Blow, 1959; Blow, 1979; Bolli & Saunders, 1985; Hemleben et al., 1989). Following traditions of uniting species of foraminifera with similar morphologies in the same genus irrespective of stratigraphic occurrence, the concept of *Hastigerinella* was later enlarged to include fossil species from the Eocene (*Hastigerinella eocanica* Nuttall, 1928 (p. 376), *H. jarvisi* Cushman, 1930, *H. eocanica* var. *aragonensis* Nuttall, 1930, *H. colombiana* Petters, 1954, *H. caucasica* Subbotina, 1958) and from the Cretaceous (*H. watersi* Cushman, 1931, *H. alexanderi* Cushman, 1931, *H. simplex* Morrow, 1934, *H. biozonae* Chevalier, 1961) and Miocene: *H. bermudezi* Bolli, 1957 (currently *Clavatorella bermudezi*). However, Cushman (1930) still emphasized that the original concept of the genus was based upon Rhumbler's living material.

4. Bolli, Loeblich & Tappan, 1957 (p. 30) described a new digitate genus *Clavigerinella* from the Eocene of Trinidad and designated *C. akersi* Bolli, Loeblich & Tappan, 1957 (p. 30) as the type species. Bolli (1957, p. 162) in the same volume discussed the similarity of *C. akersi* to species of *Hastigerinella* described from the Eocene. Accordingly, he placed *H. jarvisi* Cushman, 1930 (p. 18) in *Clavigerinella* and indicated that *H. eocanica* Nuttall, 1928 also belonged in that genus. Many later authors (e.g. Banner & Blow (1959, p. 10), Blow (1979, p. 1199), Toumarkine & Luterbacher (1985, p. 119), Banner (1982), Pearson (1993, p. 219) and Coxall et al. (in press)) have adopted Bolli's (1957) view that the Eocene digitate species are congeneric, and include them all in *Clavigerinella*. However, not all authors have followed this approach and some continue to separate *Hastigerinella eocanica* from *Clavigerinella* (see Saito, Thompson & Breger, 1976; Loeblich & Tappan, 1988). Based on detailed morphological and stratigraphical studies I conclude that the Eocene digitate forms share many derived features, are stratigraphically contiguous and are therefore probably phylogenetically related. Thus, I strongly support the view that they are congeneric and should be united in *Clavigerinella*.

5. Galloway (1933) attempted a revision of the taxonomy of *Hastigerinella*. Banner & Blow (1960) reviewed the subfamily HASTIGERININAE. The latter authors were

unable to locate Rhumbler's original specimens but based on examination of new material from the Atlantic Ocean confirmed that the morphotype had distinctive 'hastigerinid' morphology, as portrayed in Rhumbler's (1911) illustrations. The authors selected a suite of 'hypotypes' (p. 25) (Natural History Museum, London Cat. nos. BMNH 1959.5.11.742 and 1959.5.11.744-746); one of these was later designated as the neotype of *Hastigerina digitata* Rhumbler, 1911 (*Hastigerinella digitata*) by Banner (1965, p. 115; see para. 9 below).

6. In 1963 (p. 228) Charmatz disputed the status of *Hastigerina digitata* Rhumbler, 1911 as the type species of *Hastigerinella*, claiming the genus to be 'without a type species at the time of publication' in 1927. Charmatz proposed that the second nominal species that had been included in *Hastigerinella*, the Eocene species *Hastigerinella eocanica* Nuttall, 1928 (currently *Clavigerinella eocanica*), should automatically become the type species of the genus by subsequent monotypy.

7. In response to Charmatz's article, Loeblich & Tappan (1964, p. 494) argued that Charmatz's conclusions were 'strongly at variance' with the Code. Loeblich & Tappan (1964) claimed that the type species of the genus *Hastigerinella* was validly designated by Cushman, 1927 as *Hastigerina digitata* Rhumbler, 1911 with explicit reference to the original figures and publication. They concluded that later workers were formally correct in assuming this to have been proposed as a new nominal species, since it is not clear from Rhumbler's inadequately annotated and referenced publication that another author (i.e. Brady, 1879) was responsible for the specific name *Hastigerina digitata*.

8. In response, Charmatz (1964, p. 496) vehemently defended his earlier work, maintaining that *Hastigerina digitata* Rhumbler, 1911 was 'taxonomically non existent'. Nevertheless, in an effort to stabilize the nomenclature Charmatz said that he would apply to the Commission for resolution of the situation. There is no record of this action having been taken.

9. Banner (1965) made an informal case for acceptance of *Hastigerina digitata* Rhumbler, 1911 as a valid nominal species under the Code. Contrary to Charmatz, he argued, 'even if the authorship of *Hastigerina digitata* be denied to Rhumbler (1911), the fact that Cushman proposed the new genus *Hastigerinella* with *Hastigerina digitata* Rhumbler, 1911 as its type species would be sufficient to validate the species name'. At the same time, he designated (p. 115) a neotype for *Hastigerina digitata* Rhumbler, 1911 (see Banner & Blow, 1960, figs. 8a-c; BMNH Cat. no. 1959.5.11.744), having established that the original syntype suite was lost. In the same publication, Banner also suggested that this difficult case would be well served by an appeal to the Commission, but again no such action was taken (M. Fadel and F.T. Banner, pers. comm.).

10. The nomenclatural status of *Hastigerina digitata* Rhumbler, 1911 was again disputed by Saito, Thompson & Breger (1976). Following Charmatz's arguments, Saito et al. contended that Rhumbler's (1911) misleading citation rendered the name and nominal species 'non existent'. They concluded that *Hastigerinella* was 'without a type species' at the time of publication and deemed *Hastigerinella eocanica* Nuttall, 1928 the type species of the genus by subsequent monotypy. However, Saito et al. (1976, p. 285) agreed that Rhumbler's 1911 form represented a distinct morphotype that was clearly unrelated to *Globigerina digitata* Brady, 1879. They gave the entirely

new name *Hastigerinopsis digitiformans* Saito & Thompson (p. 285) to Rhumbler's taxon using Banner's (1965) neotype of '*Hastigerina digitata* Rhumbler, 1911' (see para. 9 above) as the holotype.

11. In the most recent treatment of extant planktonic foraminifera Hemleben et al. (1989) presented a classification based upon details of wall texture and spine morphology, features that are believed to most closely reflect phylogenetic and biological affinities. In this work, the nominal species *Hastigerina digitata* Rhumbler, 1911 is classified together with *Hastigerina pelagica* (d'Orbigny, 1839) under the heading 'Hastigerinids with triradiate spines'. Christoph Hemleben (pers. comm.) has commented recently that the ultrastructure of *H. digitata* is identical to that of *H. pelagica*, suggesting a very close evolutionary relationship between the two, and he argues for inclusion of *H. digitata* within *Hastigerina*, as was originally intended by Rhumbler (1911).

12. Charmatz's (1963, 1964) and Saito et al.'s (1976) type species proposals invoke a major shift in the concept of *Hastigerinella* from being a taxon representing Recent digitate forms with a distinctive *Hastigerina*-like wall and triradiate spines to Eocene fossils, that probably possessed rounded spines, have an entirely different wall structure and mode of coiling and a disjunct stratigraphic occurrence. Moreover, it calls into question the taxonomic status of the genus *Clavigerinella* Bolli, Loeblich & Tappan, 1957 (see para. 4 above). If, as proposed by Charmatz (1963), the type species of *Hastigerinella* is not the modern hastigerinid *Hastigerina digitata* (as was implied by Cushman) but the Eocene *Hastigerinella eocanica* and, as is widely believed, all the Eocene digitate forms are congeneric, *Clavigerinella* would become a junior synonym of *Hastigerinella*. This would cause extreme confusion in the current understanding of both *Hastigerinella* Cushman, 1927 and *Clavigerinella* Bolli, Loeblich & Tappan, 1957 as used throughout the literature (e.g. Blow, 1979; Kennett & Srinivasan, 1983; Bolli & Saunders, 1985; Toumarkine & Luterbacher, 1985; Loeblich & Tappan, 1987; Hemleben et al., 1989).

13. In agreement with Loeblich & Tappan (1964) and Banner (1965, 1982), I reject Charmatz's (1963, 1964) and Saito et al.'s (1976) conclusion that the original type species of *Hastigerinella* (i.e. *Hastigerina digitata* Rhumbler, 1911) is invalid under the Code. However, as previous attempts to resolve this case merely by discussion and reference to relevant articles of the Code have failed, I bring this application to the Commission for a formal resolution. Maintenance of the current widespread usage of both *Hastigerinella* Cushman, 1927 and *Clavigerinella* Bolli, Loeblich & Tappan, 1957 can be achieved by accepting that *Hastigerina digitata* Rhumbler, 1911 is the type species of *Hastigerinella*, in accordance with the view of Banner & Blow (1959), Banner (1982) and Hemleben et al. (1989).

14. It might perhaps be held, under Articles 11.10 and 67.13, that there is a nominal species *Hastigerinella digitata* Cushman, 1927, and that this is the type species of *Hastigerinella*. However, this 'new' authorship would cause unnecessary confusion. It is also necessary to protect the specific name *digitata* Rhumbler, 1911 from the operation of Article 49 of the Code, since *digitata* Brady, 1879 had been applied to the taxon by misidentification.

15. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the name *digitata* Rhumbler, 1911, as published in the binomen *Hastigerina digitata*, is deemed to be the

specific name of a then-new nominal species and is not to be treated as a misidentification of *Globigerina digitata* Brady, 1879;

- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Hastigerinella* Cushman, 1927 (gender: feminine), type species by original designation *Hastigerina digitata* Rhumbler, 1911;
 - (b) *Clavigerinella* Bolli, Loeblich & Tappan, 1957 (gender: feminine), type species by original designation *Clavigerinella akersi* Bolli, Loeblich & Tappan, 1957;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *digitata* Rhumbler, 1911, as published in the binomen *Hastigerina digitata* and as defined by the neotype cited in para. 9 above and ruled in (1) above to be deemed to be the specific name of a then-new nominal species (specific name of the type species of *Hastigerinella* Cushman, 1927);
 - (b) *akersi* Bolli, Loeblich & Tappan, 1957, as published in the binomen *Clavigerinella akersi* (specific name of the type species of *Clavigerinella* Bolli, Loeblich & Tappan, 1957).

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Case 3260***Titanodamon johnstonii* Pocock, 1894 (currently *Damon johnstonii*; Arachnida, Amblypygi): proposed conservation of the specific name**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the widely used specific name *Titanodamon johnstonii* Pocock, 1894 (currently *Damon johnstonii*; family PHRYNICHIDAE) for a species of whip spider (Amblypygi) by suppressing its senior synonym *D. australis* Simon, 1886, that has been used doubtfully only once.

Keywords. Nomenclature; taxonomy; Amblypygi; PHRYNICHIDAE: *Damon*; *Damon johnstonii*; whip spiders.

1. Pocock (1894, p. 289) introduced the generic name *Titanodamon* (type species by original designation the new species *T. johnstonii*) for three new West African whip spider (Amblypygi) species (family PHRYNICHIDAE) and described *T. johnstonii* (pp. 291–292) on the basis of a number of specimens from rainforests of Nigeria, the mountains of Cameroon, Fernando Po and Gabon. The designated holotype, an adult male from Rio del Rez near Old Calabar (Nigeria), is deposited in The Natural History Museum, London (accession no. BMNH 1890.3.18.3).

2. Simon (1886, pp. 575–576) described *Damon australis* from a small specimen allegedly from 'Santa Cruz de Patagonia'. The specimen is deposited in the Muséum National d'Histoire Naturelle in Paris (without number and not marked as a type specimen). It clearly is an immature specimen of *T. johnstonii*. No other similar specimen has been recorded from South America since, and it is virtually certain that the neotropical locality is erroneous (see Weygoldt, 1999).

3. Kraepelin (1895, pp. 14–17) recognized only one species of *Titanodamon* to be valid, and he treated *T. johnstonii* as a subspecies of *T. medius* (Herbst, 1797) i.e. as *T. medius johnstonii* Pocock. On p. 19 of the same paper, he erroneously considered *Damon australis* to be a junior synonym of *D. variegatus* (Perty, 1834). However, in 1899 Kraepelin included the genus *Titanodamon* in *Damon* C.L. Koch, 1850 and considered *Damon johnstonii* to be a valid species.

4. Subsequent authors (e.g. Fage, 1939, p. 110; Fage, 1954, pp. 181–182; Lawrence, 1969, pp. 85–86) either retained the generic name *Titanodamon* only for *T. johnstonii* or followed Kraepelin (1899) in considering *Titanodamon* to be a junior synonym of *Damon* (e.g. Quintero, 1976).

5. The name *T. australis* (Simon, 1886) has been used only once (tentatively) by Fage (1939, p. 110). He discussed the possibility that it could represent a second species of *Titanodamon*, but he also said that it 's'agit malheureusement d'un

exemplaire jeune qui possède incontestablement tous les attributs du genre, mais qu'il est impossible de caractériser spécifiquement'.

6. In contrast, Pocock's (1894) specific name *T. johnstonii* has been used by all the authors cited above for the large and conspicuous West African species that is found between south-eastern Nigeria and Gabon. Further, all the identified West African specimens from various museums that I have studied are labelled *Damon johnstonii*. Although *T. australis* is a slightly older name than *T. johnstonii*, it has been used only once (and then doubtfully; see para. 5 above) and is based on one juvenile specimen attributed to the wrong continent. As a result, it would be destabilizing to adopt it in place of *T. johnstonii* even though it has priority.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *australis* Simon, 1886, as published in the binomen *Damon australis*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *johnstonii* Pocock, 1894, as published in the binomen *Titanodamon johnstonii* (specific name of the type species of *Titanodamon* Pocock, 1894);
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *australis* Simon, 1886, as published in the binomen *Damon australis* and as suppressed in (1) above.

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Case 3256***Leptusa* Kraatz, 1856 and *Cyllopisalia* Pace, 1982 (Insecta, Coleoptera): proposed conservation**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the generic name *Leptusa* Kraatz, 1856 and subgeneric name *Cyllopisalia* Pace, 1982 for a widespread group of rove beetles (family STAPHYLINIDAE). Both names are threatened by limited usage of a senior synonym, *Sipalia* Mulsant & Rey, 1853. The use of *Sipalia* in place of *Leptusa* causes great confusion because from 1909 to 1974 most authors used the name *Sipalia* for the rove beetle genus now known as *Geostiba* Thomson, 1858. It is proposed that the name *Sipalia* should be suppressed.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; ALEOCHARINAE; *Leptusa*; *Cyllopisalia*; *Geostiba*; *Bolitochara pulchella*; *Aleochara circellaris*; rove beetles.

1. Mulsant & Rey (1853, p. 32) described *Sipalia* (family STAPHYLINIDAE) as a subgenus of *Homalota* Mannerheim, 1830, and included six rove beetle species. Three of these, including *Homalota difformis* Mulsant & Rey, 1853 (p. 33), are now placed in *Leptusa* Kraatz, 1856 (p. 60), two are in *Geostiba* Thomson, 1858 (p. 33), and one is in *Octavius* Fauvel, 1873. They did not designate a type species for *Sipalia*.

2. Kraatz (1856, p. 60) described the genus *Leptusa* for eleven nominal species (among them '*Leptusa analis* Gyllenhal, 1810' (p. 388) and *Homalota* (*Sipalia*) *difformis* Mulsant & Rey, 1853), but did not designate a type species. Thomson (1859, p. 32) designated '*Leptusa analis* Gyllenhal, 1810' as the type species of *Leptusa*, but this is an unavailable name and a misidentification of *Bolitochara pulchella* Mannerheim, 1830 (see Pope, 1977, p. 34) and Thomson's designation was thus invalid. *Bolitochara pulchella* Mannerheim, 1830 (p. 83) has been designated as the type species of *Leptusa* Kraatz, 1856 under Article 70.3.2 (see Gusarov & Herman, 2003). Pace (1983, p. 57) had earlier but invalidly cited *B. pulchella* as the type species of *Leptusa*.

3. Thomson (1859, p. 40) designated *Homalota brachyptera* Thomson, 1852 as the type species of *Sipalia*, but this designation is invalid because this nominal species was not originally included in the genus (see Article 67.2.1).

4. Fauvel (1902a, p. 40) validly designated *Homalota difformis* Mulsant & Rey, 1853 (p. 33) as the type species of *Sipalia* Mulsant & Rey, 1853. However, as *Homalota difformis* was already a member of *Leptusa* (see Kraatz, 1856, p. 66; Bernhauer, 1900, p. 420), Fauvel used *Sipalia* (1853) instead of *Leptusa* (1856) as the senior synonym (see Fauvel, 1902b, p. 158).

5. Evidently most workers overlooked Fauvel's type designation for *Sipalia*. The name *Leptusa* continued to be used for the genus that included *Homalota difformis*, the type species of *Sipalia* (see Bernhauer, 1905, p. 250; Reitter, 1909, p. 80; Bernhauer & Scheerpeltz, 1926, p. 553; Scheerpeltz, 1966, p. 18; and in at least 72 other works by 25 authors before 1974). At the same time the name *Sipalia* was used for the genus now known as *Geostiba* Thomson, 1858 (p. 33) (type species by monotypy: *Aleochara circellaris* Gravenhorst, 1806 (p. 155) (see Sainte-Claire Deville, 1906, p. 127; Reitter, 1909, p. 45; Bernhauer & Scheerpeltz, 1926, p. 599; Scheerpeltz, 1934, p. 1585; and in at least 56 works by 20 authors from 1909 to 1974).

6. Lohse (1974, p. 42) and Benick & Lohse (1974, p. 111) directed attention to the synonymy of *Sipalia* and *Leptusa* and acknowledged that the former had priority over the latter, but nevertheless used *Leptusa*, not *Sipalia*, as the valid name. Their reason for this was to avoid confusion with *Geostiba* Thomson, 1858, which had been referred to incorrectly as *Sipalia* for nearly 70 years. Most staphylinid workers accepted this approach, even though it was not valid under the Code.

7. Scheerpeltz (1966, p. 18) described *Parapisalia* as a subgenus of *Leptusa* Kraatz, 1856 and designated *Homalota difformis* Mulsant & Rey, 1853 (p. 33) as the type species. However, this name is a junior objective synonym of *Sipalia* and a junior homonym of *Parapisalia* Scheerpeltz, 1948 (p. 159) (type species: *Leptusa puellaris* Hampe, 1863 by original designation). It would appear that in 1966 Scheerpeltz overlooked his previous usage of the name *Parapisalia*.

8. Pace (1982, p. 40) proposed the name *Cyllophisalia* (type species: *Homalota difformis* Mulsant & Rey, 1853 (p. 33); see Article 67.8) to replace *Parapisalia* Scheerpeltz, 1966. Pace stated that, according to a 'strict interpretation of the Code', *Sipalia* (*Sipalia*) Mulsant & Rey, 1853 would be the valid name for this subgenus. He then argued that the name *Sipalia* must not be conserved because it had been used for the familiar genus known as *Geostiba* Thomson, 1858 for more than half a century. Whatever the merits of these arguments of prevailing use by Lohse (1974) and Pace (1982), the Code does not allow the reversal of precedence of *Leptusa* or *Cyllophisalia* over *Sipalia* without application to the Commission, as the conditions of Article 23.9.1 are not met.

9. *Leptusa* (tribe HOMALOTINI) is a well-known genus that includes more than 400 species and subspecies distributed in the Holarctic and Oriental regions, temperate South America and subantarctic islands. This name has been used by more than 34 authors in at least 97 works published during the last 50 years; a record of these is held by the Commission Secretariat. However as *Sipalia* has been used in seven works (Sawada, 1970a, p. 40; 1970b, p. 34; 1990, p. 541; Burakowski et al., 1981, p. 40; Borowiec, 1990, p. 820; Mazur, 1995, p. 75; 2000, p. 16) in this period, the name *Leptusa* is prevented from 'automatic' conservation under Article 23.9.2. The

subgenus *Cyllopalia* Pace, 1982 currently includes 18 species and subspecies distributed in France and Italy, but this name has been used in only four papers by one author (Pace, 1982, p. 40; 1989, p. 140; 1996, p. 27; 1999, p. 211).

10. Acceptance of strict priority and the use of *Sipalia* in place of *Leptusa* would seriously threaten universality and cause significant confusion. This is because from 1909 to 1974 most authors (see para. 6 above) used the name *Sipalia* for the genus now known as *Geostiba* (tribe *ATHETINI*). Consequently, it is important that the name *Sipalia* Mulsant & Rey, 1853 is suppressed to stabilize the nomenclature and avoid confusion between *Sipalia* as a senior synonym of *Leptusa* and *Cyllopalia*, and *Sipalia* of authors as used for *Geostiba* Thomson, 1859.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Sipalia* Mulsant & Rey, 1853 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Leptusa* Kraatz, 1856 (gender: feminine), type species by subsequent designation by Gusarov & Herman (2003) *Bolitochara pulchella* Mannerheim, 1830;
 - (b) *Cyllopalia* Pace, 1982 (gender: feminine), type species, by original designation of the replaced nominal genus *Parapalisia* Scheerpeltz, 1966, *Homalota difformis* Mulsant & Rey, 1853;
 - (c) *Geostiba* Thomson, 1858 (gender: feminine), type species by monotypy *Aleochara circellaris* Gravenhorst, 1806;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *pulchella* Mannerheim, 1830, as published in the binomen *Bolitochara pulchella* (specific name of the type species of *Leptusa* Kraatz, 1856);
 - (b) *difformis* Mulsant & Rey, 1853, as published in the binomen *Homalota difformis* (specific name of the type species of *Cyllopalia* Pace, 1982);
 - (c) *circellaris* Gravenhorst, 1806, as published in the binomen *Aleochara circellaris* (specific name of the type species of *Geostiba* Thomson, 1858);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Sipalia* Mulsant & Rey, 1853, as suppressed in (1) above;
 - (b) *Parapalisia* Scheerpeltz, 1966 (a junior homonym of *Parapalisia* Scheerpeltz, 1948).

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Case 3279***Curculio picipes* Marsham, 1802 (currently *Procas picipes*; Insecta, Coleoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application, under Article 23.9.5 of the Code, is to conserve the name *Curculio picipes* Marsham, 1802 (currently *Procas picipes*) for a widely distributed Palaearctic weevil (family ERIRHINIDAE) that appears in numerous faunal lists and catalogues. Marsham's name is a junior primary homonym of *Curculio picipes* Fabricius, 1777, but the two nominal species have not been considered congeneric since the early 1800s and are currently placed in different families. In addition, *Curculio picipes* Fabricius, 1777 is an unused name as it has been considered a junior synonym of *Otiorhynchus singularis* (Linnaeus, 1767) (family CURCULIONIDAE) since 1871.

Keywords. Nomenclature; taxonomy; Coleoptera; CURCULIONOIDEA; *Procas*; *Procas picipes*; weevils; Palaearctic.

1. Westwood, 1838 (p. 36) designated *Curculio picipes* Marsham, 1802 (p. 272) as the type species of the weevil genus *Procas* Stephens, 1831 (p. 90) (currently in the family ERIRHINIDAE; superfamily CURCULIONOIDEA). In 1879, Bedel (p. xviii) erroneously placed *C. picipes* in synonymy with *P. armillatus* (Fabricius, 1801). *C. picipes* (currently *Procas picipes*) is a widely distributed Palaearctic species that appears in numerous faunal lists and catalogues (e.g. Alonso-Zarazaga & Lyal, 1999).

2. *C. picipes* Marsham, 1802 is a junior primary homonym of *C. picipes* Fabricius, 1777 (p. 229). *C. picipes* Fabricius was formally synonymized with *Otiorhynchus singularis* (Linnaeus, 1767) by Gemminger & Harold (1871, p. 2268), although the names had already been associated with each other by Gyllenhal (1813, p. 318). *C. picipes* Fabricius has remained unused and in this synonymy ever since.

3. The nominal species *C. picipes* Marsham, 1802 and *C. picipes* Fabricius, 1777 have not been regarded as congeneric since revision of the genus *Curculio* in the early 1800s and they are now placed in distantly related weevil families (ERIRHINIDAE and CURCULIONIDAE respectively). Article 23.9.5 states that when it is discovered that a specific name in use is a junior primary homonym of another specific name already in use, but the names apply to taxa not considered congeneric after 1899, the junior homonym must not be replaced automatically. Instead, the case should be referred to the Commission. Replacement of the junior homonym in this case would cause nomenclatural confusion.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the name *picipes* Marsham, 1802, as published in the binomen *Curculio picipes*, is not invalid by reason of being a junior primary homonym of *Curculio picipes* Fabricius, 1777;
- (2) to place on the Official List of Generic Names in Zoology the name *Procas* Stephens, 1831 (gender: masculine), type species by subsequent designation by Westwood (1838) *Curculio picipes* Marsham, 1802;
- (3) to place on the Official List of Specific Names in Zoology the name *picipes* Marsham, 1802, as published in the binomen *Curculio picipes* (type species of *Procas* Stephens, 1831) and ruled in (1) above to be not invalid by reason of being a junior primary homonym of *Curculio picipes* Fabricius, 1777.

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Case 3251***Thereva* Latreille, 1797 and *Phasia* Latreille, 1804 (Insecta, Diptera): proposed conservation of usage by designation of *Musca plebeja* Linnaeus, 1758 as the type species of *Thereva***

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Abstract. The purpose of this application, in relation to Article 67.2 of the Code, is to conserve the usage of the name *Thereva* Latreille, 1797 for a cosmopolitan genus of stiletto flies (family THEREVIDAE) that currently includes 201 species, and also the usage of *Phasia* Latreille, 1804 and PHASIINAE for a group of tachinid flies (family TACHINIDAE), some of which are economically important as parasites of plant bugs (Heteroptera). It is proposed that *Musca plebeja* Linnaeus, 1758 should be designated as the type species of the therevid genus *Thereva*. *M. plebeja* was not one of the nominal species that were first associated with the name *Thereva* by Fabricius (1798). Fabricius used *Thereva* for a group of tachinid flies that are now referred to by the name *Phasia* Latreille, 1804.

Keywords. Nomenclature; taxonomy; Diptera; THEREVIDAE; TACHINIDAE; *Thereva*; *Phasia*; *Thereva plebeja*; stiletto flies; tachinids.

1. Latreille (1797, p. 168) described a genus of stiletto flies (now in the family THEREVIDAE) and named it *Thereva*. He stated that the genus was characterised by two pulvilli ('deux pelotes') and wings that are held open over the abdomen and angled slightly upwards ('écartées, un peu assurgentes'). He described the abdomen as conical ('Abdomen conique, déprimé') and noted that the antennae are the length of the head with the last segment conical, articulated apically, and bearing a small lateral bristle ('Antennes de la longueur de la tête; dernier article conique, articulé à l'extrémité, avec une petite soie latérale').

2. The following year Fabricius (1798, pp. 549, 560) also used the name *Thereva*. His description did not mention the state of the pulvillus and on p. 560 he referred to the wings of *Thereva* as crassiform and opaque with maculations ('alis duabis,

crassis, maculates, opaci'). He described the large, rounded ciliate calypter of the wing ('squama halterum magna, rotundata, ciliata') and the body of *Thereva* as being fat and ovate ('corpus medium, crassum, obesum, ovatum'). Most significantly, Fabricius (1798, p. 549) described the antennae of *Thereva* as short, recumbent, compressed and bearing a seta ('Antennae breves, incumbentes, compressae, extrorsum crassiores, setiarum').

3. It is clear that Latreille (1797) and Fabricius (1798) were describing two very different groups of flies under the name *Thereva*. The characters described by the two authors place *Thereva* sensu Latreille in the superfamily ASILOIDEA (sub-order Brachycera) and *Thereva* sensu Fabricius in the subfamily PHASIIDAE (family TACHINIDAE; sub-order Cyclorhapha). In other words, Latreille was describing a group of stiletto flies and Fabricius was describing a group of tachinid flies.

4. Latreille's description made the generic name *Thereva* available in 1797, but he did not then assign any nominal species to the genus. However, in 1798 Fabricius provided a list of six species as members of the genus *Thereva* as he understood the concept. These were all tachinid species: *Conops subcoleoprata* Linnaeus, 1767, *Syrphus hemipterus*, *S. crassipennis* and *S. affinis* Fabricius, 1794; and two new species, *Thereva analis* and *T. obesa*. As recorded in the Commission's Opinion 896 (April 1970), *C. subcoleoprata* is the type species of *Phasia* Latreille, 1804 (p. 195) by subsequent monotypy and *S. crassipennis* is the type species of *Ectophasia* Townsend, 1912 by original designation; *T. obesa* is the type species of *Allophorella* Townsend, 1912 (which is a junior synonym of *Phasia*; see Herting & Dely-Draskovits, 1993). *S. affinis* is a junior synonym of *Phasia subcoleoprata* (Linnaeus), and *T. analis* Fabricius is a junior synonym of *Ectophasia crassipennis* (Fabricius). Designating any one of these nominal species as the type species would not conserve the universally accepted use of the name *Thereva* for a group of stiletto flies, and could threaten the tachinid names *Phasia* or *Ectophasia*.

5. Latreille (1802) associated the first stiletto fly species with *Thereva*. He (p. 441) gave '*Bibio plebeja* F.' as an 'exemple' of *Thereva*, and listed this as '*Bibio plebeia*. Fab.—*Musca plebeia*. Lin.'; he also included '*Bibio marginata* Fab.' in the genus. In 1810 (p. 421) Latreille stated that '*l'espèce qui sert de type*' of *Thereva* was '*Bibio plebeia*. Fab.', i.e. *Musca plebeja* Linnaeus, 1758 (p. 589).

6. As noted by Latreille (1802), Fabricius (1775, 1787, 1794, 1798 and also in 1805) consistently placed *Musca plebeja* Linnaeus in the nominal genus *Bibio* and described additional stiletto fly species in *Bibio*. Most other insect systematists publishing between 1800 and 1820 (e.g. Panzer, 1800, 1804; Meigen, 1803, 1804; Schellenberg, 1803; Fallén, 1814, 1815, 1820) followed the Fabrician concept of these taxa, describing phasiine tachinids within *Thereva* and placing stiletto flies in *Bibio*. Fabricius (1775, p. 756) used *Bibio* in a different taxonomic sense from that used previously by Geoffroy (1762, pp. 450, 568); Geoffroy's sense of *Bibio* is that in current use and was conserved by the Commission in Opinion 441 (January 1957) with *Tipula hortolana* Linnaeus, 1758 as the type species.

7. In 1820 Meigen changed his practice of 1803 and 1804 (see para. 6 above) and used the generic name *Thereva* in Latreille's sense for some of the stiletto fly species previously included in *Bibio* sensu Fabricius; he used *Phasia* Latreille, 1804 for the tachinid species previously included in *Thereva* sensu Fabricius.

8. Subsequent to Meigen (1824) practically all works have used the generic name *Thereva* for stiletto fly taxa and *Phasia* for tachinid taxa. These include all modern regional Diptera catalogs, manuals, textbooks and field guides; a list of many major works is held by the Commission Secretariat. A search of recent volumes of *Zoological Record* (1984–2001) yields 35 recent citations of the name *Thereva*, 137 citations of TEREVIDAE, and in the TACHINIDAE 26 citations of *Phasia* and 33 of PHASIINAE.

9. Although the type species of *Phasia* and *Ectophasia* are settled, and both names were placed on the Official List in 1970, modern catalogues differ in regard to the valid type species of *Thereva*. In the catalogue of Diptera of America north of Mexico (Cole, 1965, p. 352), *Musca plebeja* Linnaeus is given as the type species by subsequent monotypy by Latreille (1802). This was accepted by Lyneborg (1975, p. 93) in the Oriental catalogue of Diptera; by Lyneborg (1980, p. 320) in the Afrotropical catalogue of Diptera; by Irwin & Lyneborg (1989, p. 358) in the Australasian and Oceanian catalogue of Diptera; by Herting & Dely-Draskovits (1993, p. 409) in the Palaearctic catalogue of Diptera; and by Sabrosky (1999, p. 306). However, Lyneborg (1980, p. 320) noted that this typification for *Thereva* Latreille rests on the assumption that the use of *Thereva* by Fabricius (1798, p. 560) was a homonymous proposal separate from that of Latreille, because *M. plebeja* was not one of the nominal species associated with the name *Thereva* (see para. 4 above) and that Commission action was needed to validate this assumption.

10. In fact, seven of the generic names proposed by Latreille (1797) (but without any included species) were subsequently published by Fabricius in 1798 (with included species) for generic concepts different to those intended by Latreille; it is hardly likely that Fabricius proposed all these names independently. To date, the Commission has been asked to consider only one of these seven cases. In that ruling (Opinion 346, June 1955) the Commission considered the use of the scarabeid beetle name *Geotrupes* by Fabricius (1798, p. 7) to be a use in a different sense of *Geotrupes* Latreille, 1797 (p. 6), and not to be an independent junior homonym. This is likely to be the realistic interpretation, because not only did Latreille (1804, p. 142) complain about the misapplication of his own generic names by Fabricius but the latter also altered the application of names published by other authors.

11. Herting (1984, p. 168) designated *Conops subcoleoprata* Linnaeus, 1767 as the type species of *Thereva* Fabricius, 1798, and reiterated this in Herting & Dely-Draskovits (1993). In these two publications *Thereva* Fabricius, 1798 is identified as a junior homonym of *Thereva* Latreille, 1797 and a senior synonym of *Phasia* Latreille, 1804. Unfortunately, Herting proposed this type designation without formally establishing *Thereva* Fabricius as an independent and homonymous proposal of *Thereva* through application to the Commission. If Fabricius is considered to have used Latreille's name, rather than creating a new one, then Herting's designation of *Conops subcoleoprata* as the type species would fix *Thereva* as a tachinid genus, contrary to the long usage of *Thereva* and *Phasia* detailed above. This fixation, although in strict conformity with Articles 67.2.2 and 67.7 of the Code, would cause very wide confusion in the nomenclature of more than 200 species and several generic and family-group names; it would set aside an informal consensus of use which has prevented taxonomic confusion for more than 150 years.

12. We propose that Latreille's intention (see para. 5 above) and long usage (see para. 9 above) should be ratified by fixing *Musca plebeja* Linnaeus, 1758 as the type species of *Thereva*. This proposal was electronically circulated to a number of dipterists and the following specialists also support our proposal: Drs. K. Barber, Sault Sainte Marie, Ontario; Daniel Bickel and David McAlpine, Sydney, Australia; Brian Brown, Los Angeles, California; Robert Cannings, Victoria, British Columbia; Eric Fisher and Stephen Gaimari, Sacramento, California; Graham Griffiths, Sherwood Park, Alberta; Martin Hauser, Urbana, Illinois; Heikki Hippa & Thomas Pape, Stockholm, Sweden; Wayne Mathis, Allen Norrbom & Norman Woodley, Washington, D.C.; Adrian Pont, Oxford; Knut Rognes, Stavanger, Norway; Graham Rotheray, Edinburgh, Scotland; Margaret Schneider, Brisbane, Australia; Martin Speight, Dublin, Ireland; Terry Wheeler, Montreal, Quebec; and Brian Wiegmann and Shaun Winterton, Raleigh, North Carolina.

13. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Thereva* Latreille, 1797 and to designate *Musca plebeja* Linnaeus, 1758 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Thereva* Latreille, 1797 (gender: feminine), type species by designation in (1) above *Musca plebeja* Linnaeus, 1758;
- (3) to place on the Official List of Specific Names in Zoology the name *plebeja* Linnaeus, 1758, as published in the binomen *Musca plebeja* (specific name of the type species of *Thereva* Latreille, 1797);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Thereva* Fabricius, 1798 (a junior homonym of *Thereva* Latreille, 1797).

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Case 3269

Rhamphomyia* (*Rhamphomyia*) Meigen, 1822 and *Rhamphomyia* (*Pararhamphomyia*) Frey, 1922 (Insecta, Diptera): proposed conservation of usage of the subgeneric names by designation of *Empis sulcata* Meigen, 1804 as the type species of *Rhamphomyia

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Abstract. The purpose of this application, under Article 70.2 of the Code, is to conserve the widespread usage of the subgeneric names *Rhamphomyia* (*Rhamphomyia*) Meigen, 1822 and *Rhamphomyia* (*Pararhamphomyia*) Frey, 1922 for groups of dance-flies (family EMPIDIDAE) by designating *Empis sulcata* Meigen, 1804 as the type species of *Rhamphomyia* (*Rhamphomyia*) Meigen, 1822. The valid type species is *Empis marginata* Fabricius, 1787. However, in 1834 Curtis invalidly designated *Empis sulcata* Meigen, 1804 as the type species and all subsequent authors have accepted this designation. Acceptance of the valid type species designation (*Empis marginata*) would destabilise the current usage of these subgeneric names and those of over 200 species currently included in these groups.

Keywords. Nomenclature; taxonomy; Diptera; EMPIDIDAE; *Rhamphomyia*; *Rhamphomyia* (*Rhamphomyia*) *marginata*; *Rhamphomyia* (*Pararhamphomyia*) *geniculata*; dance-flies.

1. Meigen (1822, p. 42) described the genus *Rhamphomyia* and included 37 species. No type species was designated at that time. Guérin in Bory de Saint-Vincent (1828, p. 547) subsequently designated *Empis marginata* Fabricius, 1787 (p. 364) as the type species for *Rhamphomyia*, and provided a description of the genus and the characters that distinguish this genus from related genera. All subsequent authors overlooked this publication and type species designation until Evenhuis (1994) showed that *Empis marginata* was the valid type species of *Rhamphomyia* (and hence *Rhamphomyia* (*Rhamphomyia*)).

2. Apparently unaware of the work of Guérin, Curtis (1834, pl. 517 and accompanying text) designated *Empis sulcata* Meigen, 1804 as the type species of *Rhamphomyia*. This action was followed by Coquillett (1903) in his list of genera of EMPIDIDAE, and then again in (1910) in his list of names of most genus-group taxa of North American Diptera. With the exception of Evenhuis (1994), *Empis sulcata* has been acknowledged to be the type species of *Rhamphomyia* in all publications (including all modern regional catalogues) subsequent to Coquillett (1903, 1910).

3. Currently, both *Empis sulcata* and *E. marginata* are assigned respectively to different subgenera: *Rhamphomyia* (*Rhamphomyia*) and *Rhamphomyia* (*Pararhamphomyia*) Frey, 1922 (p. 3). The type species by original designation (Frey, 1922, p. 33) of the subgenus *Rhamphomyia* (*Pararhamphomyia*) is *Empis plumipes* Fallén, 1816 (p. 25). This was a misidentification of *R. geniculata* Meigen, 1830 (p. 340; see Collin, 1961) and under Article 70.3.2 we herewith fix *R. geniculata* as the type species. The currently accepted subgeneric classification follows that of Collin (1961) with some comments by Barták (1981). Chvála & Wagner (1989) followed this classification for the 'Catalogue of Palearctic Diptera', where there are currently 110 species assigned to *Rhamphomyia* (*Rhamphomyia*) and 112 species assigned to *Rhamphomyia* (*Pararhamphomyia*).

4. There remains only a single specimen of the original type series of *Empis sulcata* (see Collin, 1961, p. 387; Barták, 1989, p. 5). Unfortunately, this is a female, which is indistinguishable from several closely related species. However, the species was redescribed by Collin (1961, p. 383) and Barták (1982, p. 412) and all subsequent workers have used the name *Empis sulcata* in their sense.

5. Replacement of the currently accepted type species of *Rhamphomyia* (*Rhamphomyia*), *Empis sulcata*, with the valid type species designation, *Empis marginata*, would result in many new combinations and would cause undue confusion and instability in the nomenclature and taxonomy of the EMPIDIDAE. Therefore, we propose that the type designation for *Rhamphomyia* made by Guérin (1828) be set aside and that *Empis sulcata* Meigen be designated as the type species following the action of Curtis (1834).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all fixations of type species for the nominal genus *Rhamphomyia* Meigen, 1822 prior to the designation by Curtis (1834) of *Empis sulcata* Meigen, 1804;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Rhamphomyia* Meigen, 1822 (gender: feminine), type species by subsequent designation by Curtis (1834) as ruled in (1) above *Empis sulcata* Meigen, 1822;
 - (b) *Pararhamphomyia* Frey, 1922 (gender: feminine), type species by original designation *Empis plumipes* Fallén, 1816 (a misidentification of *Rhamphomyia geniculata* Meigen, 1830, fixed as the type species by Barták & Sinclair (2003));
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *sulcata* Meigen, 1822, as published in the binomen *Empis sulcata* (specific name of the type species of *Rhamphomyia* Meigen, 1822);
 - (b) *geniculata* Meigen, 1830, as published in the binomen *Rhamphomyia geniculata* (specific name of the type species of *Pararhamphomyia* Frey, 1922).

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Case 3255***Macropodus concolor* Ahl, 1937 (Osteichthyes, Perciformes): proposed conservation of the specific name**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the specific name of *Macropodus concolor* Ahl, 1937, which has consistently been used for the Black Paradise Fish (family OSPHRONEMIDAE), a well known freshwater fish from Southeast Asia. The name is threatened by the senior objective synonym *Macropodus spechti* Schreitmüller, 1936 for which suppression is proposed.

Keywords. Nomenclature; taxonomy; OSPHRONEMIDAE; *Macropodus concolor*; Black Paradise Fish; Southeast Asia.

1. In July 1936 the aquarist and fish hobbyist W. Schreitmüller gave two specimens of a new species of Paradise Fish (genus *Macropodus* Lacepède) to E. Ahl for determination and description. A few months later (October) on his own initiative, Schreitmüller introduced the name *Macropodus opercularis* Linnaeus var. *spechti* (a subspecific name under Article 45.6.4) for this fish with an illustration and general description in which he did not mention any particular specimens (Schreitmüller, 1936a, p. 181). In November Schreitmüller (1936b, p. 501) used the name *Macropodus opercularis concolor* Ahl with reference to Ahl's forthcoming description, which was already in print at that time. Schreitmüller (1936b, p. 501) requested that *Macropodus opercularis* var. *spechti* should be treated as a synonym of *Macropodus opercularis concolor* Ahl and explained that he did not want to anticipate the scientific decision: 'Da ich der Wissenschaft nicht vorgreifen will, bitte ich, nunmehr den . . . Namen '*M. opercularis spechti* Schreitm. 1936' als Synonym zu führen'. Although Schreitmüller's action had no significance with respect to the Principle of Priority the name *Macropodus opercularis* var. *spechti* has been virtually forgotten.

2. Ahl's description of the new fish, under the name *Macropodus opercularis concolor*, was published in February 1937 (Ahl, 1937, p. 117). Two syntypes were deposited in the Zoologisches Museum Berlin; a lectotype ZMB 31380 was designated by Paepke (1994, p. 75). Since that time *Macropodus opercularis concolor* and *Macropodus concolor* (after recognition of the species rank by Vierke, 1978b, p. 76) have both been used as the name for the Black Paradise Fish in scientific and popular works (see Schwier, 1939; Vadasz et al., 1978; Vierke, 1978a; Paepke, 1992, 1994; Freyhof & Herder, 2002; an additional 28 references are held by the Commission Secretariat).

3. Freyhof & Herder (2002, p. 156) used the name *Macropodus spechti* for the Black Paradise Fish. They stated that the name *M. spechti* was not a nomen oblitum as it had not been rejected as such between 1961 and 1973 (Article 23.12) and it was

therefore available. Accordingly, Freyhof & Herder (2002, p. 160) reasoned that 'Ahl's material of *M. concolor* is part of the material referred to by Schreitmüller (1936a)' and designated the lectotype of *M. opercularis concolor* Ahl (see para. 2 above) as the lectotype of *M. opercularis* var. *spechti* Schreitmüller, 1936, making the names objective synonyms (Freyhof & Herder, 2002, p. 160). Until the action by Freyhof & Herder the senior name was effectively forgotten. Considering that Schreitmüller (1936b) indicated that the name *spechti* Schreitmüller, 1936 be recognized as a synonym of the then unpublished name *concolor* Ahl, 1937 it seems appropriate to follow Recommendation 23A and refer this case to the Commission for a ruling.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the subspecific name *spechti* Schreitmüller, 1936, as published in the trinomen *Macropodus opercularis spechti*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *concolor* Ahl, 1937, as published in the trinomen *Macropodus opercularis concolor*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *spechti* Schreitmüller, 1936, as published in the trinomen *Macropodus opercularis spechti* and as suppressed in (1) above.

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Case 3277***Chitra chitra* Nutaphand, 1986 (Reptilia, Testudines): proposed precedence of the specific name over that of *Chitra selenkae* Jaekel, 1911**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the widely used name *Chitra chitra* Nutaphand, 1986 for the Narrow-headed Softshell turtle (Testudines; family TRIONYCHIDAE) found in Thailand, Malaysia and on the islands of Sumatra and Java, Indonesia, by giving it precedence over the neglected palaeontological name *Chitra selenkae* Jaekel, 1911, whenever the two are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Reptilia; Testudines; TRIONYCHIDAE; *Chitra chitra*; *Chitra selenkae*; Narrow-headed Softshell turtles; Thailand; Malaysia; Indonesia.

1. In 1911, the name *Chitra selenkae* was given to a small collection of fossilized turtle bones from several *Chitra* specimens found in Java, Indonesia, by Jaekel (1911, p. 80; see table XV). This name has been unused since its original publication (see 'Notes added in proof' in McCord & Pritchard, 2003, pp. 55–56 for details). However, as the name was used after 1899, it cannot be 'automatically' declared a nomen oblitum under Articles 23.9.1.1 and 23.9.2.

2. In 1986, the Thai biologist Wirot Nutaphand (p. 66; see pl. on p. 65) recognized the Narrow-headed Softshell turtle of Thailand as specifically distinct from *Chitra indica* (Gray, 1831) that is found on the Indian subcontinent (*C. indica* is the type species by monotypy of *Chitra* Gray, 1844) and assigned it the name *Chitra chitra* (see McCord & Pritchard, 2003, p. 18). Note that Nutaphand (Nutphand in some works) is sometimes referred to by his first name in the literature, making the full citation of this name *Chitra chitra* Wirot, 1986. Although, application of the first name is traditional for everyday usage in Thailand, we follow the convention in zoological nomenclature of using the author's surname. *C. chitra* has been used in reference to the Narrow-headed Softshell from Thailand, peninsular Malaysia and Indonesia in at least 31 works, by at least 59 authors encompassing a span of not less than ten years in the last 50 years (e.g. see all references except Gray (1831, 1844) and Jaekel (1911) given in the reference list below; further references are held by the Commission Secretariat), thus meeting the criteria for reversal of precedence in Article 23.9.1.2.

3. Since Nutaphand's (1986) work, it has been widely accepted (e.g. Engstrom, Shaffer & McCord (2002, pp. 176–178); McCord & Pritchard (2003, pp. 35–37)) that

the Recent Thai, Malaysian and Indonesian populations of *C. chitra* turtles are conspecific. According to the Principle of Priority, if the fossil remains from Java named *C. selenkae* are also conspecific with the above, the name *C. selenkae* would be the valid name for this species. However, use of the senior synonym would cause nomenclatural confusion as the name *C. chitra* is in widespread use (see reference list below, with the exception of Gray (1831, 1844) and Jaekel (1911)).

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *chitra* Nutaphand, 1986, as published in the binomen *Chitra chitra*, precedence over the name *selenkae* Jaekel, 1911, as published in the binomen *Chitra selenkae*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *chitra* Nutaphand, 1986, as published in the binomen *Chitra chitra*, with the endorsement that it is to be given precedence over the name *selenkae* Jaekel, 1911, as published in the binomen *Chitra selenkae*, whenever the two are considered to be synonyms;
 - (b) *selenkae* Jaekel, 1911, as published in the binomen *Chitra selenkae*, with the endorsement that it is not to be given priority over *chitra* Nutaphand, 1986, as published in the binomen *Chitra chitra*, whenever the two are considered to be synonyms.

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Chitra c. javanensis McCord & Pritchard, 2003, the recently described subspecies of *Chitra chitra* Nutaphand, 1986 found on the Indonesian island of Java.

Case 3266***Palaeortyx phasianoides* Milne-Edwards, 1869 (Aves, Galliformes):
proposed conservation of usage of the specific name by the designation
of a neotype**

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Abstract. The purpose of this application, under Article 75.6 of the Code, is to conserve the current usage of the name *Palaeortyx phasianoides* Milne-Edwards, 1869 for a species of fossil quail from the Miocene (family PHASIANIDAE) by the designation of a neotype. This is necessary because the specimen designated as lectotype in 2000 is not the species currently named *P. phasianoides*. It is proposed that this lectotype designation be set aside and a neotype designated in accord with accustomed understanding and usage of the name *P. phasianoides*.

Keywords. Nomenclature; taxonomy; Aves; Galliformes; PHASIANIDAE; quails; *Palaeortyx phasianoides*; Miocene; Europe.

1. In 1869 (p. 230), Milne-Edwards described the new phasianid genus *Palaeortyx* with three new species from the Lower Miocene site of Saint-Gérard-le-Puy, France. He designated (p. 230) one of the new species, *Palaeortyx gallica* (p. 230), as the type species. Another species, *P. phasianoides* (p. 237), was based on a fossil scapula and a fragmentary humerus (a humerus shaft with the proximal and distal ends broken off). Both syntypes are housed in the Muséum National d'Histoire Naturelle (MNHN) in Paris. Milne-Edwards (1869, pp. 237–239) first described the scapula (specimen no. MNHN Av 2895) and then attributed the humerus shaft (MNHN Av 2896) to this species ('L'humérus je pense appartenir à cette espèce . . .'), followed by its description. Both syntypes were figured (inverted) by Milne-Edwards (1869, pl. 130, figs. 22–27).

2. During the course of further excavations in the 19th and 20th centuries, more material of *Palaeortyx phasianoides* was found at the type locality Saint-Gérard-le-Puy. This topotypic material is housed in the collections of the Université Claude Bernard, Lyon 1, of the Muséum Lyon, of the Muséum National d'Histoire Naturelle, Paris, and of the Bayerische Staatssammlung für Paläontologie und Geologie, Munich. We are currently investigating this material. In addition,

Palaeortyx phasianoides has been described from a number of other Miocene localities in Europe: La Grive (France, Middle Miocene; Ballmann, 1969a); Wintershof-West (Germany, Lower Miocene; Ballmann 1969b); Dolnice (Czech Republic, Lower Miocene; Švec, 1980). *Palaeortyx phasianoides* is thus a very well known and often mentioned species.

3. Ballmann (1969b) published a description of the fossil birds, including *Palaeortyx phasianoides*, from Wintershof-West, Germany. Ballmann was the first to recognise that the fragmentary syntype humerus (MNHN Av 2896) from Saint-Gérand-le-Puy was much too large for attribution to *P. phasianoides* and noted (p. 31): 'Der von ihm [Milne-Edwards] auf Tafel 130, figs. 26–27 abgebildete und auf S. 239 beschriebene Humerus, den er zu *Palaeortyx phasianoides* rechnet, kann infolge seiner wesentlich größeren Ausmaße nicht zu dieser Art gehören'. Ballmann recorded that, although badly preserved, the humerus belonged to a galliform. At the same time he referred five other humeri (MNHN Av 2912–2916) found at Saint-Gérand-le-Puy, and clearly differing from the syntype humerus (MNHN Av 2896), to *P. phasianoides*. Consequently, the syntype-scapula should have been fixed as lectotype, but unfortunately Ballmann (1969b) failed to do so explicitly.

4. Recently, Mlíkovský (2000, p. 93) studied the syntypes of *Palaeortyx phasianoides* and a small part of the topotypic material from the Muséum National d'Histoire Naturelle, Paris. Mlíkovský ignored Ballmann's (1969b) identification, although he cited the publication. He fixed the fragmentary syntype humerus as the lectotype of *P. phasianoides*, arguing the humerus to be the more diagnostic element. We agree that generally an avian humerus is more diagnostic than a scapula, but not if the proximal and distal ends are lacking as in the syntype humerus. However, in the following paragraph of the same publication, Mlíkovský determined his lectotype humerus to be a pathological humerus of the anatid *Anas blanchardi* Milne-Edwards, 1863 (currently *Mionetta blanchardi*; Anseriformes, family ANSERIDAE). He noted that, as a consequence, the galliform species name *Palaeortyx phasianoides* was a junior subjective synonym of the anseriform species name *Mionetta blanchardi*. The anatid taxon *M. blanchardi* is one of the most common avian species (some thousands of specimens) in the Saint-Gérand-le-Puy deposits (detailed descriptions were given by Cheneval, 1983, 1987 and a tarsometatarsus lectotype was designated by Cheneval, 1983). Its osteology characterizes *M. blanchardi* as a true anatid that is clearly distinguishable from *P. phasianoides*. Until Mlíkovský's (2000) action, the name *P. phasianoides* had been universally accepted and much used in the taxonomic sense of a galliform (see, for example, Milne-Edwards, 1869, pp. 237–239; Lydekker, 1891, p. 139; Gaillard, 1908, pp. 97, 109; Lambrecht, 1933, p. 452; Brodkorb, 1967, p. 112; Ballmann, 1969a, pp. 178–180; Ballmann, 1969b, pp. 31–33; Švec, 1980, pp. 383–384; Bocheński, 1997, p. 308; Mourer-Chauviré, 2000, p. 481; Cheneval, 2000, p. 344).

5. Additionally, in a reverse of Ballmann's (1969b) argument, Mlíkovský (2000, p. 93) recorded that the syntype scapula of *Palaeortyx phasianoides* could not be considered a phasianid and that it was too small to belong to the same species as the lectotype humerus. He noted that the taxonomic identity of the scapula remained unresolved.

6. In our view, Mlíkovský's (2000) actions were based on incorrect identifications. He recognized correctly that the humerus (MNHN Av 2896) that he fixed as the lectotype of *Palaeortyx phasianoides* corresponds well with a further, complete

humerus from Saint-Gérard-le-Puy in the Hoffstetter collection in Paris (newly numbered MNHN SG 13734), which was labelled (in handwriting) as '*Anas consobrina* (taille *M. blanchardi*)'. Mlíkovský accepted the humerus MNHN SG 13734 as '*Mionetta blanchardi*' but, because of its morphological differences in comparison with the general morphology of the humeri of this species, he mistakenly concluded that it was a pathological specimen. In 2002 the authors restudied the humerus and recognized it as typical of the primitive galliform species *Ameripodius alexis* Mourer-Chauviré, 2000 (family QUERCYMEGAPODIIDAE), described from Saint-Gérard-le-Puy and based on several bones of the appendicular skeleton housed in the Collection of the Université Claude Bernard, Lyon 1, and the Muséum National d'Histoire Naturelle, Paris. The lectotype humerus of *P. phasianoides* (MNHN Av 2896) is also this species. Moreover, Mlíkovský's statement that the syntype scapula (his paralectotype, MNHN Av 2895) is not a phasianid is incorrect. Our study of the syntype scapula and the entire material of *P. phasianoides* from Saint-Gérard-le-Puy shows that it is typical of a phasianid and therefore would have been the correct choice for the lectotype.

7. So far, no other authors have commented on the suitability of Mlíkovský's (2000) designation. Mlíkovský did not respect Ballmann's (1969b) exclusion of the humerus from the syntypes. Instead he designated it as the lectotype and at the same time determined it erroneously as a pathological anatid. We therefore propose that the lectotype be set aside and that a neotype be designated in accord with the accustomed usage of the name *phasianoides*. This action would avoid considerable disruption and confusion affecting the involved species *Palaeortyx phasianoides*, *Mionetta blanchardi* and *Ameripodius alexis*. The proposed neotype is the first-described syntype of *P. phasianoides*, the scapula (MNHN Av 2895) from Saint-Gérard-le-Puy, France, housed in the Muséum National d'Histoire Naturelle, Paris.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Palaeortyx phasianoides* Milne-Edwards, 1869 and to designate the scapula from Saint-Gérard-le-Puy, France (specimen no. MNHN Av 2895 in the Muséum National d'Histoire Naturelle, Paris) as the neotype;
- (2) to place on the Official List of Specific Names in Zoology the name *phasianoides* Milne-Edwards, 1869, as published in the binomen *Palaeortyx phasianoides* and as defined by the neotype designated in (1) above.

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Comment on the draft proposal to amend the Code with respect to trace fossils
(Proposal; see BZN 60: 141–142)

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The comment by Bertling et al. suggests that the Code's provisions relating to ichnotaxa (taxa based on fossils of animal 'works') need emending, but it is based on definitions of 'work of an animal', 'ichnotaxon' and 'trace fossil' (see their para. 2) which differ from the meanings in the Code. When the meanings given in the Code Articles and Glossary are used, the supposed difficulty disappears and there is no need for a Code amendment.

Article 1.2.1 states that the Code applies to 'names based on the fossilized work of organisms (ichnotaxa), . . .', and in the Glossary 'work of an animal' is defined as 'The result of the activity of an animal (e.g. burrows, . . . galls, . . . nests, . . . cocoons, . . . tracks), but not part of the animal. The term applies to trace fossils (see ichnotaxon) . . .'. Article 42.2.1 refers to 'names for trace fossils (ichnotaxa)'. Under Article 72.5.1, 'an example of the fossilized work of an animal' is eligible to be the name-bearing type of a nominal taxon. Contrary to the interpretation of Bertling et al. names based on fossilized galls, cocoons, etc. *are* ichnotaxa, exactly like those based on fossilized tracks. All these fossils, not of animals themselves but resulting from their activities, are commonly called trace fossils.

The confusion perhaps arises from the Glossary, where an ichnotaxon is said to be 'A taxon based on the fossilized work of an animal, including fossilized trails, tracks or burrows (trace fossils) made by an animal'. This wording (carried forward from the previous edition of the Code) does confirm that taxa based on fossil galls, cocoons etc. are ichnotaxa, but it should not be interpreted to mean that such specimens cannot be called trace fossils. However, since the present authors have had doubts it would have been better if '(trace fossils)' had been placed before the first comma, or even omitted altogether, so that the term could not be thought to have a very restricted meaning. Comparison of Articles 1.2.1 and 42.2.1 (see above) shows that 'fossilized works of animals' and 'trace fossils' are synonymous and that nominal taxa based on such material are ichnotaxa.

Bertling et al. propose (para. 3) to define 'work of an animal' as 'trace fossils (including burrows, . . . nests) as well as secretions such as eggs, . . . pupal cases, . . . and plant galls'. However, 'works' do not have to be fossil. Eggs (and most pupal cases) are not secretions (nor indeed are plant galls), but are life stages or parts of animals, not 'works'; nominal taxa based on their fossils are not ichnotaxa but are subject to all the normal provisions of the Code (see Article 17.3). The present definition is both shorter and more accurate.

Bertling et al. (para. 4) refer to the nomenclatural treatment of ichnofamilies, and say that criteria for their establishment should not differ from those of other ichnotaxa. There are in fact no such special criteria. In particular, it is recommended that the principle of typification should be extended to ichnofamilies. However, this principle already applies in the usual way, since Articles 29 and 63 apply to the typification and formation of ichnofamilies exactly as to other family taxa. The only

difference between ichnofamilies and 'normal' families lies in Article 23.7.3, which states that names established for an ichnotaxon [at any rank] do not compete in priority with names based on animals themselves.

A further point made by Bertling et al. is that Article 1.3.6 should be revoked; this allows the availability of names established before 1931 that were based on the 'work' of extant (i.e. not extinct) animals. It should however be noted that these non-fossil names do not relate to ichnotaxa and are subject to the Code's normal provisions. The authors state that they are not aware of any such names that are in use: nor am I, but this does not mean that they do not exist! As Bertling et al. say, any names that have passed out of use can be dealt with under the Code in the usual way. The revocation of Article 1.3.6 would also affect other provisions (such as Article 23.3.2.3), and it might raise unforeseen problems of homonymy. As a general principle it is rash to revoke or emend any Code provision unless there is a clear need to do so and the consequences have been taken into account.

Bertling et al. have formed the impression that the Code draws a distinction between fossilized tracks and other 'works' such as galls, coprolites and nests. This is not the case (and the previous edition used the same wordings). I might add that during the formulation of the present Code, many ichnologists made suggestions, and these led inter alia to the requirement that after 2000 new ichnogenera must have a type species (Articles 13.3.3, 66.1). I do not believe that Bertling et al. have demonstrated the need for any changes to the Code's provisions, but it would be helpful if future editions were to include a Glossary entry for 'trace fossil', making it clear that the term is synonymous with 'fossilized work of an animal'. As a member of the former Editorial Committee, I regret that this omission was overlooked during the revision of the Glossary.

In conclusion, I should stress that the references to trace fossils in the Code relate to the works only of *animals* since the remit of the Commission is restricted to zoological nomenclature. The word 'organisms' was used in Article 1.2.1 because the nature of the agent responsible for a trace fossil is often not obvious; if the agent is known not to be animal the Code does not apply.

Comments on the neotypification of Protists, especially Ciliates (Protozoa, Ciliophora)

(General Article; see BZN **59**: 165–169; **60**: 48–49, 143)

(1) Michael A. Sleight

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As the Managing Editor of the *European Journal of Protistology*, I support Wilhelm Foissner's proposal. In his paper, Foissner has written in favour of the practice of neotypification of species, with good quality type material preserved in ways that portray diagnostic features and lodged in collections that permit re-examination and comparison with other specimens. In almost every issue of our journal we publish papers concerned with the description of species which require comparison with inadequately described and untypified species, many of them

originally named in the 19th or early 20th centuries. Often authors conclude that a newly-collected specimen, which can be fully described and preserved, cannot be distinguished from a previously illustrated, but inadequately described, type. Such studies provide a basis for valuable neotypification to stabilise the nomenclature for future work.

However, very often the newly described specimens were not collected in the same location as the originally named organism. By strict application of Article 75.3.6 of the Code, the newly described specimen cannot be regarded as a neotype because it was found in a different locality from the original type. Many, indeed probably most, protozoa are cosmopolitan, and are also very patchily distributed according to their microhabitat requirements. These microhabitats are usually transient, so that the species may have become extinct in the type location long ago, but may be abundant in other places where the conditions now suit them. Therefore, to insist that neotype material of protozoa must be obtained from the locality of original discovery may be unrealistic, or even impossible. The same probably applies to microscopic organisms of other groups occupying similar ecological niches. If this locality restriction is formally waived in the case of protozoa, then more of the taxonomists working with protozoa will be encouraged to deposit useful neotype material of the species they study in suitable type collections. In addition, journal editors will be in a position to encourage, or insist on, such deposition.

(2) Inácio Domingos da Silva Neto

Instituto de Biologia, Universidade Federal do Rio de Janeiro, Brazil

I support Wilhelm Foissner's proposal that the neotypes of protists, especially Ciliates, should be freed from the type locality regulation of Article 75.3.6 of the Code.

(3) Jerzy Sikora

Department of Cell Biology, Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warszawa, Poland

Wilhelm Foissner presents a convincing argument concerning the neotypification of protists. As Editor of *Acta Protozoologica*, I am interested in clarification of nomenclatural problems. Not being a specialist in systematics and taxonomy, I rely on Dr. Foissner's opinion and expertise. He undoubtedly enjoys the respect of people dealing with protists, especially heterotrophic ciliates. Therefore I consider his appeal to the Commission concerning waiving Article 75.3.6 of the Code to be a reasonable and valuable initiative.

Comments on the proposed conservation of usage of *Acmaeodera* Eschscholtz, 1829 and *Acmaeoderella* Cobos, 1955 (Insecta, Coleoptera) by designation of *Buprestis cylindrica* Fabricius, 1775 as the type species of *Acmaeodera*
(Case 3258; see BZN 60: 31–33)

(1) Vladimir Sakalian

Institute of Zoology, Bulgarian Academy of Sciences, 1 Tzar Osvoboditel Blvd., 1000 Sofia, Bulgaria

I support this application, because it will ensure stability by conserving the current usage by all contemporary authors of these generic names.

(2) Ted C. MacRae

Monsanto, 700 Chesterfield Parkway West, Chesterfield, Mo 63017, U.S.A.

I support this application, because adherence to priority would require massive and unjustified nomenclatural rearrangement.

(3) Svatopluk Bílý

Department of Entomology, National Museum, Prague, Czech Republic

I support this application, because it is the right approach to maintaining nomenclatural stability in this group of beetles.

(4) Allen Sundholm

96 Turrella Street, Turrella 2205, Sydney, N.S.W., Australia

I support this application, in the interests of stability.

Comment on the proposed precedence of *Ovula gisortiana* Passy, 1859 over *Cypraea coombii* J. de C. Sowerby in Dixon, 1850.

(Case 3220; see BZN 59: 173–175)

J.A. Todd

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I write in opposition to the proposal to give precedence to *Gisortia gisortiana* (Passy, 1859) over *G. coombii* (J. de C. Sowerby in Dixon, 1850) should they be considered to be synonymous.

Since Schilder's redescription of *Gisortia coombii* (J. de C. Sowerby in Dixon, 1850) in 1929 from five specimens (one of which he subsequently (Schilder, 1930, p. 128) correctly recognized as a probable French specimen referable to *G. tuberculosa* (Duclos)), only four additional specimens of this species have found their way into the Natural History Museum collections in London. I know of no other specimens elsewhere in public museums. Through examination, I have been able to precisely localize all of these specimens in a modern stratigraphical context. Labels on recently collected material, combined with the preservation, matrix and contained fossils in the material Schilder examined, indicate that this species has been collected from only a thin stratigraphical interval (units E2ii to E4) of the Earnley Formation (previously part of the Lower Bracklesham Beds) of early Lutetian age from Bracklesham Bay, West Sussex (see Curry et al., 1978). This is despite these highly fossiliferous foreshore rock exposures being regularly exposed and collected from by many persons over at least the past 25 years. *Gisortia coombii* is

evidently a rare species with a very limited stratigraphic range, but that does not make it a forgotten one.

As *Gisortia coombii* has been found very rarely and from just one small locality in Britain, it is hardly surprising that its name has received limited use. Nevertheless, Pacaud & Dolin omit to mention that this species was featured (and considered valid) in the systematic compendium of Schilder (1930) that is still the most complete treatment of this group. This work cannot be considered merely 'a nomenclator or other index or list of names' (Article 23.9.6 of the Code), but a brief yet thorough systematic treatment, with identification keys to all then recognized species, complete synonymies, details of individual specimens, two tables of shell measurements and character states and two plates of illustrations.

Notwithstanding Schilder's work, the systematics of *Gisortia* species is still very uncertain for the six reasons that he enumerated in 1930. Of these, two (his points 4 and 6) are particularly germane with respect to the current application. First, 'many specimens are known only from one of a few species, so that some may be varieties of other species, for the variability of some common species is rather considerable' (Schilder, 1930, pp. 118–119). Secondly, 'most writers have had no opportunity to examine original specimens from foreign countries and to compare them with the species of their own country' (p. 119). Quite simply, Pacaud & Dolin fail to make a convincing case for the identity of *G. gisortiana* and *G. coombii*, though it is possible that future detailed systematic work might establish this. No new data have been published on the newly collected French material to which the authors allude. The current considerable uncertainties in species status are highlighted by Dolin & Dolin (1983) considering *G. gisortiana* as synonymous with another nominal species, *G. gigantea* (Quenstedt, 1836), but that opinion, which is identical with Vredenburg's (1927), is not mentioned in this application.

Gisortia species are largely characterized by their general proportions and the features developed in the thick layers of callus that cover their shells (Vredenburg, 1927; Schilder, 1930). At present, there are neither studies of intrapopulation variation among putative adults, nor ontogenetic studies of the development of the callus in any one species. Consequently it is quite uncertain how specimens from widely separated localities, of differing sizes and possibly ontogenetic ages, can be adequately compared in a systematic context (compare the size of the type specimens: Pacaud & Dolin, figs. 1 and 2). *Gisortia* shells appear to have relatively few discrete and constant characters and it seems likely that fruitful systematic re-evaluation of this group will require the use of morphometric methods.

To conclude, I regard the current application as essentially taxonomic rather than nomenclatural in nature. The proposed taxonomic act is unsubstantiated and premature. I regard each of the four actions proposed in this case as unnecessary.

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- Quenstedt, F.A.** 1836. Beiträge zur Petrefaktenkunde. *Archiv für Naturgeschichte*, (2)**1**: 245–250.

Comment on proposed conservation of the usage of the names *Phymaturus* Gravenhorst, 1838 and *Lacerta palluma* Molina, 1782 (currently *Phymaturus palluma*; Reptilia, Sauria) by designation of a neotype for *Lacerta palluma* Molina, 1782

(Case 3225; see BZN **60**: 38–41; 58)

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I support this application, as it is important to conserve current usage of these two widely used names.

Comment on the proposed conservation of the specific name of *Macropodus concolor* Ahl, 1937 (Osteichthyes, Perciformes)

(Case 3255; see BZN **60**: 206–207)

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We strongly support the application by Schindler & Staeck to conserve the specific name *Macropodus concolor* Ahl, 1937 (family OSPHRONEMIDAE). Since its introduction the senior synonym *M. spechti* Schreitmüller, 1936 had not been used as the valid name for the species until it was resurrected by Freyhof & Herder (2002). Their action to replace the long accepted specific name of *M. concolor* does not promote stability and was in contravention of the Preamble and Article 23.2 of the Code.

Unfortunately the problem of *M. concolor* versus *M. spechti* is only the tip of the iceberg. A number of similar ornamental fish names like *M. spechti* (mostly of infrasubspecific rank) are hidden in the old popular aquarist literature. Such names were often published without correct diagnosis or designation of type specimens and are therefore generally disregarded in favour of junior synonyms based on a solid scientific description like *M. concolor*.

We fear that other ichthyologists could follow the example given by Freyhof & Herder (2002). More names still hidden in the old popular literature could be exhumed in favour of the Principle of Priority and contrary to the promotion of stability. See Kullander & Britz (2002) concerning the replacement of the well known name *Badis burmanicus* Ahl in Arnold & Ahl, 1936 by the name *Badis rubra* Schreitmüller, 1923. Such a trend would lead to instability of nomenclature and cause unnecessary work for the Commission. Therefore we strongly support Schindler & Staeck's application.

Additional reference

Kullander, S.O. & Britz, R. 2002. Revision of the family Badidae (Teleostei: Perciformes) with description of a new genus and ten new species. *Ichthyological Exploration of Freshwaters*, **13**(4): 295–372.

OPINION 2046 (Case 3185)***Criconema* Hofmänner & Menzel, 1914 (Nematoda): *Eubostrichus guernei* Certes, 1899 designated as the type species**

Abstract. The Commission has ruled that current usage of the generic names *Criconema* Hofmänner & Menzel, 1914 and *Criconemoides* Taylor, 1936 is maintained by the designation of *Eubostrichus guernei* Certes, 1889 as the type species of the free-living soil nematode genus *Criconema*.

Keywords. Nomenclature; taxonomy; Nematoda; Tylenchida; CRICONEMATIDAE; *Criconema*; *Criconemoides*; *Criconema guernei*; *Criconemoides morgense*.

Ruling

- (1) Under the plenary power all previous fixations of type species for *Criconema* Hofmänner & Menzel, 1914 are hereby set aside and *Eubostrichus guernei* Certes, 1889 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Criconema* Hofmänner & Menzel, 1914 (gender: neuter), type species by designation in (1) above *Eubostrichus guernei* Certes, 1889;
 - (b) *Criconemoides* Taylor, 1936 (gender: masculine), type species by original designation *Criconema morgense* Hofmänner & Menzel, 1914.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *guernei* Certes, 1889, as published in the binomen *Eubostrichus guernei* (specific name of the type species of *Criconema* Hofmänner & Menzel, 1914);
 - (b) *morgense* Hofmänner & Menzel, 1914, as published in the binomen *Criconema morgense* (specific name of the type species of *Criconemoides* Taylor, 1936).

History of Case 3185

An application to conserve the current usage of the generic names *Criconema* Hofmänner & Menzel, 1914 and *Criconemoides* Taylor, 1936 by designating *Eubostrichus guernei* Certes, 1889 as the type species of *Criconema* was received from P.A.A. Loof (*Department of Nematology, Wageningen University, Wageningen, The Netherlands*), I. Andrassy (*Eötvös Loránd Tudományegyetem, Allatrendszertani és ökológiai Tanszék, Budapest, Hungary*), M. Luc (*6 rue Boutard, Neuilly-sur-Seine, France*), D.J. Raski (*1912 Alpine Place, Davis, California, U.S.A.*), M.R. Siddiqi (*Commonwealth Institute of Parasitology, St. Albans, U.K.*) and W.M. Wouts (*Landcare Research, Auckland, New Zealand*) on 18 December 2000. After correspondence the case was published in **BZN 58**: 179–181 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN **58**: 180. At the close of the voting period on 1 June 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Bouchet abstained, no vote was received from Böhme.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- Criconema* Hofmänner & Menzel, 1914, *Zoologischer Anzeiger*, **44**: 88.
Criconemoides Taylor, 1936, *Transactions of the American Microscopical Society*, **55**: 406.
guernei, *Eubostrichus*, Certes, 1889, *Mission Scientifique du Cap Horn (1882–1883)*, vol. 6, Zoologie, p. L.48.
morgense, *Criconema*, Hofmänner & Menzel, 1914, *Zoologischer Anzeiger*, **44**: 90.

OPINION 2047 (Case 2652)**CHORISTIDAE Verrill, 1882 (Mollusca, Gastropoda): spelling emended to CHORISTEIDAE, so removing the homonymy with CHORISTIDAE Esben-Petersen, 1915 (Insecta, Mecoptera)**

Abstract. The Commission has ruled that the homonymy between two family-group names: CHORISTIDAE Verrill, 1882 (Gastropoda) and CHORISTIDAE Esben-Petersen, 1915 (Mecoptera) is eliminated by emending the spelling of Verrill's name to CHORISTEIDAE. Verrill's family-group name is based on the generic name *Choristes* Carpenter in Dawson, 1872. Esben-Petersen's family-group name is based on the widely-used name of the Australian scorpion-fly genus *Chorista* Klug, 1836.

Keywords. Nomenclature; taxonomy; Gastropoda; Mecoptera; CHORISTEIDAE; CHORISTIDAE; *Choristes*; *Chorista*; scorpion-fly; Australia.

Ruling

- (1) Under the plenary power it is hereby ruled that for the purposes of Article 29 of the Code, the stem of the generic name *Choristes* Carpenter in Dawson, 1872 is CHORISTE- (Gastropoda).
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Chorista* Klug, 1836 (gender: masculine), type species by subsequent monotypy *Chorista australis* Klug, 1838 (Mecoptera);
 - (b) *Choristes* Carpenter in Dawson, 1872 (gender: masculine), type species by monotypy *Choristes elegans* Carpenter in Dawson, 1872 (Gastropoda).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *australis* Klug, 1838, as published in the binomen *Chorista australis* (specific name of the type species of *Chorista* Klug, 1836) (Mecoptera);
 - (b) *elegans* Carpenter in Dawson, 1872, as published in the binomen *Choristes elegans* (specific name of the type species of *Choristes* Carpenter in Dawson, 1872) (Gastropoda).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) CHORISTIDAE Esben-Petersen, 1915 (type genus *Chorista* Klug, 1836) (Mecoptera);
 - (b) CHORISTEIDAE Verrill, 1882 (spelling emended under the plenary power in (1) above from CHORISTIDAE Verrill, 1882; type genus *Choristes* Carpenter in Dawson, 1872) (Gastropoda).
- (5) The name CHORISTIDAE Verrill, 1882 (spelling emended to CHORISTEIDAE by the ruling in (1) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (Gastropoda).

History of Case 2652

An application to remove the homonymy between the family-group names CHORISTIDAE Verrill, 1882 (Gastropoda) and CHORISTIDAE Esben-Petersen, 1915 (Mecoptera) was received from Alan R. Kabat (*Museum of Comparative Zoology, Harvard University, Cambridge, MA, U.S.A.*) on 5 April 1988. After correspondence the case was published in BZN 46: 156–160 (September 1989). Notice of the case was sent to appropriate journals. No comments on this case were received.

Decision of the Commission

On 1 September 1990 the members of the Commission were invited to vote on the proposals published in BZN 46: 158. At the close of the voting period on 1 December 1990 the votes were as follows: 25 Commissioners voted FOR the proposals, 2 Commissioners voted AGAINST, no vote was received from Halvorsen.

Voting against, Heppell raised taxonomic questions relating to the possible misidentification of the genus on which Verrill based his family-group name. After deliberation it was considered that if any additional taxonomic information had a bearing on the stability of the names in this case then it should be the subject of a separate application under Article 41 of the Code.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

australis, *Chorista*, Klug, 1838, *Physikalische Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin*, 1836: 101.

Chorista Klug, 1836, *Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*, 1: 54.

CHORISTEIDAE Verrill, 1882, *Transactions of the Connecticut Academy of Arts and Sciences*, 5(2): 540.

Choristes Carpenter in Dawson, 1872, *The Canadian Naturalist and Quarterly Journal of Science*, (n.s.)6(4): 392.

CHORISTIDAE Esben-Petersen, 1915, *Entomologiske Meddelelser*, (2)5: 232.

CHORISTIDAE Verrill, 1882, *Transactions of the Connecticut Academy of Arts and Sciences*, 5(2): 540.

elegans, *Choristes*, Carpenter in Dawson, 1872, *The Canadian Naturalist and Quarterly Journal of Science*, (n.s.)6(4): 392.

OPINION 2048 (Case 3212)***Thalassema taenioides* Ikeda, 1904 (currently *Ikeda taenioides*; Echiura): specific name conserved**

Abstract. The Commission has ruled that the specific name of *Ikeda taenioides* (Ikeda, 1904) for a species of echiuran from the coasts of Japan is conserved by the suppression of *Thalassema halotaeniai* Ikeda, 1901 and *T. taeniaides* Ikeda, 1902, two earlier names that have remained unused since publication.

Keywords. Nomenclature; taxonomy; Echiura; Heteromyota; IKEDINAE; *Ikeda*; *Ikeda taenioides*; Japan.

Ruling

- (1) Under the plenary power the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *halotaeniai* Ikeda, 1901, as published in the binomen *Thalassema halotaeniai*;
 - (b) *taeniaides* Ikeda, 1902, as published in the binomen *Thalassema taeniaides*.
- (2) The name *Ikeda* Wharton, 1913 (gender: feminine), type species by monotypy *Thalassema taenioides* Ikeda, 1904, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *taenioides* Ikeda, 1904, as published in the binomen *Thalassema taenioides* (specific name of the type species of *Ikeda* Wharton, 1913), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
 - (a) *halotaeniai* Ikeda, 1901, as published in the binomen *Thalassema halotaeniai* and as suppressed in (1)(a) above;
 - (b) *taeniaides* Ikeda, 1902, as published in the binomen *Thalassema taeniaides* and as suppressed in (1)(b) above.

History of Case 3212

An application to conserve the specific name of *Ikeda taenioides* (Ikeda, 1904) for a species of echiuran from the coasts of Japan by the suppression of two older, unused names, *Thalassema halotaeniai* Ikeda, 1901 and *T. taeniaides* Ikeda, 1902, was received from Teruaki Nishikawa (*The Nagoya University Museum, Chikusa-ku, Nagoya, Japan*) on 11 July 2001. After correspondence the case was published in BZN 58: 277–279 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. A comment in support of the case was published in BZN 59: 130.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 58: 278. At the close of the voting period on 1 June 2003

the votes were as follows: 22 Commissioners voted FOR the proposals, 2 Commissioners (Bouchet and Ng) voted AGAINST, no vote was received from Böhme.

Voting against, Ng commented that 'the species now called *T. taenioides* may be part of a species complex or it may be recognized as maybe 2 or 3 cryptic species and what is now called *T. taeniaides* would remain as just one species. The possible absence of types compounds the problem, i.e. whether to treat the three names as objective synonyms by (1) selection of a lectotype (if the existing fragments are identified as types and deemed useful taxonomically) and then make this lectotype the simultaneous lectotype of *T. taenioides* and *T. taeniaides* or (2) a neotype should be proposed for one or all three names.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

halotaeniai, *Thalassema*, Ikeda, 1901, *Dobutsugaku Zasshi* [*The Zoological Magazine, Japan*], **13**(158): 392.

Ikeda Wharton, 1913, *Philippine Journal of Science* (D. Biology), **8**(4): 266.

taeniaides, *Thalassema*, Ikeda, 1902, *Dobutsugaku Zasshi* [*The Zoological Magazine, Japan*], **14**(159): plate.

taenioides, *Thalassema*, Ikeda, 1904, *Journal of the College of Science, Imperial University of Tokyo*, **20**(4): 63.

OPINION 2049 (Case 3174)***Pardosa* C.L. Koch, 1847 and *Alopecosa* Simon, 1885 (Arachnida, Araneae): usage conserved by the designation of *Lycosa alacris* C.L. Koch, 1833 as the type species of *Pardosa***

Abstract. The Commission has ruled that *Lycosa alacris* C.L. Koch, 1833, as subsequently designated by Charitonov (1932), is fixed as the type species of the wolf spider genus *Pardosa* C.L. Koch, 1847. The unidentifiable name *Aranea chelata* O.F. Müller, 1764, at one time considered to be the oldest synonym of *P. alacris* and *P. lugubris*, is suppressed.

Keywords. Nomenclature; taxonomy; Araneae; LYCOSIDAE; *Pardosa*; *Alopecosa*; *Pardosa alacris*; *Pardosa lugubris*; *Alopecosa striatipes*; *Aranea chelata*; wolf spiders.

Ruling

- (1) Under the plenary power:
 - (a) all previous fixations of type species for the nominal genus *Pardosa* C.L. Koch, 1847 before that of *Lycosa alacris* C.L. Koch, 1833 by Charitonov (1932) are hereby set aside;
 - (b) the name *chelata* O.F. Müller, 1764, as published in the binomen *Aranea chelata*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Pardosa* C.L. Koch, 1847 (gender: feminine), type species by subsequent designation by Charitonov (1932) as ruled in (1)(a) above *Lycosa alacris* C.L. Koch, 1833;
 - (b) *Alopecosa* Simon, 1885 (gender: feminine), type species by monotypy *Aranea fabrilis* Clerck, 1758.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *alacris* C.L. Koch, 1833, as published in the binomen *Lycosa alacris* (specific name of the type species of *Pardosa* C.L. Koch, 1847);
 - (b) *fabilis* Clerck, 1758, as published in the binomen *Aranea fabrilis* (specific name of the type species of *Alopecosa* Simon, 1885).
- (4) The name *chelata* O.F. Müller, 1764, as published in the binomen *Aranea chelata* and as suppressed in 1(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3174

An application to conserve the current usage of the generic names *Pardosa* C.L. Koch, 1847 and *Alopecosa* Simon, 1885 for two genera of European wolf spiders by fixing *Lycosa alacris* C.L. Koch, 1833 as the type species of *Pardosa* was received from Torbjörn Kronstedt (*Department of Entomology, Swedish Museum of Natural*

History, Stockholm, Sweden), Charles D. Dondale (*Eastern Cereal and Oilseed Research Centre (ECORC), Research Branch, Agriculture and Agri-Food Canada, Ottawa, Canada*) and Alexey A. Zyuzin (*Abylai Khan Avenue, Almaty, Kazakhstan Republic*) on 12 September 2000. After correspondence the case was published in BZN 59: 7-11 (March 2002). The title, abstract and keywords of the case were published on the Commission's website. A comment in support of this case was published in BZN 59: 203.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposal published in BZN 59: 9-10. At the close of the voting period on 1 June 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Böhme.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- alacris*, *Lycosa*, C.L. Koch, 1833, *Faunae insectorum Germaniae initia; oder Deutschlands Insecten*, Heft 120, pl. 17, fig. 18.
Alopecosa Simon, 1885, *Exploration scientifique de la Tunisie*, Zoologie, p. 10.
chelata, *Aranea*, O.F. Müller, 1764, *Fauna Insectorum Fridrichsdalina*, p. 94.
fabrilis, *Aranea*, Clerck, 1758, *Sénska spindlar . . . Aranei Svecici, descriptionibus et figuris . . . illustrati*, p. 86.
Pardosa C.L. Koch, 1847, *Die Arachniden*, vol. 14, p. 100.

The following is the reference for the designation of *Lycosa alacris* C.L. Koch, 1833 as the type species of the nominal genus *Pardosa* C.L. Koch, 1847:

- Charitonov, D.E. 1932. *Izvestiya Biologicheskogo Nauchno-issledovatel'skogo Instituta i Biologicheskoi Stantsii pri Permskom Gosudarstvennom Universitete*, 8: 21.

OPINION 2050 (Case 3189)***Ammotrecha* Banks, 1900 and *Ammotrechula* Roewer, 1934 (Arachnida, Solifugae): usage conserved by the designation of *Galeodes limbata* Lucas, 1835 as the type species of *Ammotrecha*; and *Eremobates* Banks, 1900 and *Eremorhax* Roewer, 1934: usage conserved by the designation of *Galeodes pallipes* Say, 1823 as the type species of *Eremobates***

Abstract. The Commission has conserved the accustomed usage of (1) the generic names *Ammotrecha* Banks, 1900 and *Ammotrechula* Roewer, 1934 for two genera of camel spiders or sun spiders from Central America and Mexico (Arachnida, Solifugae) by designation of *Galeodes limbata* Lucas, 1835 as the type species of *Ammotrecha*, and (2) the generic names *Eremobates* Banks, 1900 and *Eremorhax* Roewer, 1934 for two genera of solifuges from the southern United States and Mexico by the designation of *Galeodes pallipes* Say, 1823 as the type species of *Eremobates*.

Keywords. Nomenclature; taxonomy; Arachnida; Solifugae; Solpugida; AMMOTRECHIDAE; EREMOBATIDAE; *Ammotrecha*; *Ammotrechula*; *Eremobates*; *Eremorhax*; *Ammotrecha limbata*; *Ammotrechula saltatrix*; *Eremobates pallipes*; *Eremorhax formidabilis*; solifuges; solpugids; camel spiders; sun spiders; Central America; North America; Mexico.

Ruling

- (1) Under the plenary power all previous fixations of type species for the following nominal genera are hereby set aside:
 - (a) *Ammotrecha* Banks, 1900 (= *Cleobis* Simon, 1879) before the designation by Pocock (1902) of *Galeodes limbata* Lucas, 1835;
 - (b) *Eremobates* Banks, 1900 (= *Datames* Simon, 1879) before the designation by Roewer (1934) of *Galeodes pallipes* Say, 1823.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Ammotrecha* Banks, 1900 (gender: feminine), type species by subsequent designation by Pocock (1902) *Galeodes limbata* Lucas, 1835, as ruled in (1)(a) above;
 - (b) *Ammotrechula* Roewer, 1934 (gender: feminine), type species by original designation *Cleobis saltatrix* Simon, 1879;
 - (c) *Eremobates* Banks, 1900 (gender: masculine), type species by subsequent designation by Roewer (1934) *Galeodes pallipes* Say, 1823, as ruled in (1)(b) above;
 - (d) *Eremorhax* Roewer, 1934 (gender: masculine), type species by monotypy *Datames magna* Hancock, 1888.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:

- (a) *limbata* Lucas, 1835, as published in the binomen *Galeodes limbata* (specific name of the type species of *Ammotrecha* Banks, 1900);
 - (b) *saltatrix* Simon, 1879, as published in the binomen *Cleobis saltatrix* (specific name of the type species of *Ammotrechula* Roewer, 1934);
 - (c) *pallipes* Say, 1823, as published in the binomen *Galeodes pallipes* and as defined by the neotype designated by Brookhart & Muma (1981) (specific name of the type species of *Eremobates* Banks, 1900);
 - (d) *magna* Hancock, 1888, as published in the binomen *Datames magna* (specific name of the type species of *Eremorhax* Roewer, 1934).
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
- (a) *Cleobis* Simon, 1879 (Solifugae) (a junior homonym of *Cleobis* Dana, 1847);
 - (b) *Datames* Simon, 1879 (Solifugae) (a junior homonym of *Datames* Stål, 1875).

History of Case 3189

An application to conserve four genera of camel spiders or sun spiders (Arachnida, Solifugae) from Central America, the southern United States and Mexico was received from Mark S. Harvey (*Department of Terrestrial Invertebrates, Western Australian Museum, Perth, Western Australia, Australia*) on 28 January 2001. After correspondence the case was published in BZN 58: 196–201 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 58: 199–200. At the close of the voting period on 1 June 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, 1 Commissioner (Minelli) voted AGAINST, no vote was received from Böhme.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

- Ammotrecha* Banks, 1900, *American Naturalist*, **34**: 426.
Ammotrechula Roewer, 1934, *Klassen und Ordnungen des Tierreichs*, Band 5 (Arthropoda), Abt. 4 (Arachnoidea), p. 600.
Cleobis Simon, 1879, *Annales de la Société Entomologique de France*, (5)**9**: 145.
Datames Simon, 1879, *Annales de la Société Entomologique de France*, (5)**9**: 133.
Eremobates Banks, 1900, *American Naturalist*, **34**: 426.
Eremorhax Roewer, 1934, *Klassen und Ordnungen des Tierreichs*, Band 5 (Arthropoda), Abt. 4 (Arachnoidea), p. 553.
limbata, *Galeodes*, Lucas, 1835, *Magasin de Zoologie*, **5**: Classe VIII, plate 5, text.
magna, *Datames*, Hancock, 1888, *Proceedings of the American Philosophical Society*, **25**: 107.
pallipes, *Galeodes*, Say, 1823, *Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819 and '20, by order of the Hon. J.C. Calhoun, Sec'y of War: under the command of Major Stephen H. Long*, vol. 2, p. 3, footnote.
saltatrix, *Cleobis*, Simon, 1879, *Annales de la Société Entomologique de France*, (5)**9**: 146.

The following are the references for the designation of type species for:

Ammotrecha Banks, 1900—*Galeodes limbata* Lucas, 1835:

Pocock, R.I. 1902. Arachnida: Scorpiones, Pedipalpi, and Solifugae. *Biologia Centrali-Americana*, **3**: 64.

Eremobates Banks, 1900—*Galeodes pallipes* Say, 1823:

Roewer, C.F. 1934. *Klassen und Ordnungen des Tierreichs*, Band 5 (Arthropoda), Abt. 4 (Arachnoidea), p. 555.

The following is the reference for the designation of the neotype of *Galeodes pallipes* Say, 1833:

Brookhart, J.O. & Muma, M.H. 1981. *Florida Entomologist*, **64**: 292.

OPINION 2051 (Case 3179)***Halacarus* Gosse, 1855, *H. ctenopus* Gosse, 1855 and *Thalassarachna* Packard, 1871 (Arachnida, Acari): usage of the names conserved by the designation of a neotype for *H. ctenopus***

Abstract. The Commission has designated a neotype for the marine mite *Halacarus ctenopus* Gosse, 1855 in the taxonomic sense of Lohmann (1893) in order to conserve usage of the names *Halacarus*, *H. ctenopus* and *Thalassarachna*. The interpretation of the genus *Halacarus* and of *H. ctenopus* has been based on Lohmann (1893). The taxon described by Gosse is now placed in *Thalassarachna* Packard, 1871 under the name *T. basteri* (Johnston, 1836).

Keywords. Nomenclature; taxonomy; Acari; HALACARIDAE; *Halacarus*; *Thalassarachna*; *Halacarus ctenopus*; *Thalassarachna basteri*; marine mites.

Ruling

- (1) Under the plenary power all previous type fixations for *Halacarus ctenopus* Gosse, 1855 are hereby set aside and the specimen labelled USNM No. 44-211-27 is designated as the neotype.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Halacarus* Gosse, 1855 (gender: masculine), type species by subsequent designation by Viets (1927) *Halacarus ctenopus*;
 - (b) *Thalassarachna* Packard, 1871 (gender: feminine), type species by original designation *Thalassarachna verrillii* Packard, 1871 (a junior subjective synonym of *Acarus basteri* Johnston, 1836).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *ctenopus* Gosse, 1855, as published in the binomen *Halacarus ctenopus* and as defined by the neotype designated in (1) above;
 - (b) *basteri* Johnston, 1836, as published in the binomen *Acarus basteri* (senior subjective synonym of the specific name of *Thalassarachna verrillii* Packard, 1871, the type species of *Thalassarachna* Packard, 1871).

History of Case 3179

An application to conserve the usage of the generic names *Halacarus* Gosse, 1855 and *Thalassarachna* Packard, 1871 and the specific name of *Halacarus ctenopus* Gosse, 1855 (Arachnida, Acari) by the designation of a neotype for *H. ctenopus* was received from Ilse Bartsch (*Forschungsinstitut Senckenberg, clo DESY, Hamburg, Germany*) on 12 October 2000. After correspondence the case was published in BZN 58: 202–205 (September 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposal published in *BZN* **58**: 203–204. At the close of the voting period on 1 June 2003 the votes were as follows: 22 Commissioners voted FOR the proposals, 2 Commissioners (Štys and van Tol) voted AGAINST, no vote was received from Böhme.

Voting against, Štys commented that ‘the author should preferably have applied Article 70.3.2 to endorse Lohmann’s (1893) type fixation concomitantly with the establishment of a new species (if necessary) for the misidentified *H. ctenopus* sensu Lohmann (1893) non Gosse, 1855. This would have minimalized taxonomic and nomenclatural changes’.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

basteri, *Acarus*, Johnston, 1836, *Magazine of Natural History*, **9**(63): 353.
ctenopus, *Halacarus*, Gosse, 1855, *Annals and Magazine of Natural History*, (2)**16**: 28.
Halacarus Gosse, 1855, *Annals and Magazine of Natural History*, (2)**16**: 28.
Thalassarachna Packard, 1871, *American Journal of Science*, **3**: 108.

The following is the reference for the designation of *Halacarus ctenopus* Gosse, 1855 as the type species of *Halacarus* Gosse, 1855:

Viets, K. 1927. *Zeitschrift für wissenschaftliche Zoologie*, **130**: 87.

OPINION 2052 (Case 3183)***Pagurus clypeatus* Fabricius, 1787 (currently *Coenobita clypeatus*; Crustacea, Decapoda): usage conserved by designation of a neotype**

Abstract. The Commission has ruled that the accustomed usage of the name of the common West Indian land hermit crab *Coenobita clypeatus* (Fabricius, 1787), the type species of *Coenobita* Latreille, 1829, is conserved by the replacement of the two existing East Indies syntypes of *Pagurus clypeatus* Fabricius, 1787 with a West Indies neotype. The names *C. rugosus* and *C. violascens* are also conserved.

Keywords. Nomenclature; taxonomy; Crustacea; Decapoda; COENOBITIDAE; *Coenobita*; *Coenobita clypeatus*; *C. rugosus*; *C. violascens*; hermit crabs; West Indies.

Ruling

- (1) Under the plenary power all previous type fixations for the nominal species *Pagurus clypeatus* Fabricius, 1767 are hereby set aside and the male specimen USNM 126773 is designated as the neotype.
- (2) An endorsement is hereby made to an existing entry (March 1990) on the Official List of Specific Names in Zoology recording that *Pagurus clypeatus* Fabricius, 1787 (specific name of the type species of *Coenobita* Latreille, 1829) is defined by the neotype designated in (1) above.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *rugosus* Milne Edwards, 1837, as published in the binomen *Cenobita rugosus*;
 - (b) *violascens* Heller, 1862, as published in the binomen *Coenobita violascens*.

History of Case 3183

An application to replace two existing syntypes of the common west Indian land hermit crab *Coenobita clypeatus* (Fabricius, 1787) by a neotype was received from Patsy A. McLaughlin (*Shannon Point Marine Center, Western Washington University, Anacortes, WA, U.S.A.*) and Lipke B. Holthuis (*Nationaal Natuurhistorisch Museum, Naturalis, Leiden, The Netherlands*) on 5 November 2000. After correspondence the case was published in *BZN* 59: 17–23 (March 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in *BZN* 59: 20. At the close of the voting period on 1 June 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Böhme.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

rugosus, *Cenobita*, Milne Edwards, 1837, *Histoire naturelle des crustacés*, vol. 2, p. 241.
violascens, *Coenobita*, Heller, 1862, *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, 12: 524.

OPINION 2053 (Case 3207)**STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera): 65 specific names conserved**

Abstract. The Commission has ruled that 65 specific names that have been in use for many years for rove beetles (family STAPHYLINIDAE), now placed in several different genera but which were junior primary homonyms when published, are conserved. None of the species denoted by the homonyms has been considered congeneric since 1899. Ninety nine specific names are placed on the Official List of Specific Names in Zoology.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; rove beetles.

Ruling

- (1) Under the plenary power it is hereby ruled that the specific names listed in column 1 of Table 1, as originally published in binomina with the generic names in column 2, are not invalid by reason of being junior primary homonyms of the specific names indicated in column 3.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:

The number in square brackets is the number of the name in Table 1 unless otherwise stated.

aberrans, *Philonthus*, Cameron, 1932 [33]
aberrans, *Philonthus*, Sharp, 1876 [33]
affinis, *Staphylinus*, Paykull, 1789 [47]
affinis, *Staphylinus*, Solsky, 1868 [47]
analis, *Philonthus*, Erichson, 1840 [56]
angustatus, *Staphylinus*, Geoffroy, 1785 [20]
angustatus, *Staphylinus*, Solier, 1849 [20]
apicalis, *Tachinus*, Erichson, 1839 [58]
atricapillus, *Oxytelus*, Germar, 1825 [12]
atrum, *Omalium*, Casey, 1894 [7]
atrum, *Omalium*, Heer, 1839 [7]
auricomus, *Staphylinus*, Cameron, 1929 [48]
australis, *Philonthus*, Cameron, 1943 [34]
australis, *Philonthus*, MacLeay, 1873 [34]
axillaris, *Tachinus*, Erichson, 1839 [60]
axillaris, *Tachinus*, Gravenhorst, 1806 [60]
bicolor, *Philonthus*, Fauvel, 1903 [35]
bicolor, *Staphylinus*, Laporte, 1835 [57]
bicornis, *Oxytelus*, Germar, 1823 [13]
bicornis, *Oxytelus*, Olivier, 1811 [13]
biguttatus, *Staphylinus*, Bernhauer, 1937 [42]

- biguttatus*, *Staphylinus*, Linnaeus, 1758 [42]
binotatus, *Staphylinus*, Gravenhorst, 1802 [36]
binotatus, *Staphylinus*, Gravenhorst, 1806 [36]
brevipenne, *Omalium*, Motschulsky, 1860 [1]
brunneus, *Tachinus*, Erichson, 1839 [61]
brunneus, *Tachinus*, Ullrich, 1975 [61]
cephalotes, *Staphylinus*, Gravenhorst, 1802 [Table 2, no. 3]
chrysis, *Staphylinus*, Bernhauer, 1936 [49]
chrysis, *Staphylinus*, Gravenhorst, 1806 [49]
cognatus, *Philonthus*, Sharp, 1876 [32]
cognatus, *Philonthus*, Stephens, 1832 [32]
concinus, *Staphylinus*, Gravenhorst, 1802 [9]
concinus, *Staphylinus*, Marsham, 1802 [9]
cornutus, *Oxytelus*, Bernhauer, 1936 [11]
cornutus, *Oxytelus*, Gravenhorst, 1802 [11]
crassicorne, *Omalium*, Lea, 1906 [4]
debilis, *Leptacinus*, Cameron, 1950 [30]
debilis, *Leptacinus*, Erichson, 1839 [30]
denticolle, *Omalium*, Beck, 1817 [8]
denticolle, *Omalium*, Sharp, 1889 [8]
dimidiatus, *Staphylinus*, Laporte, 1835 [50]
fulvipes, *Tachinus*, Erichson, 1840 [59]
gratus, *Philonthus*, Cameron, 1943 [28]
gratus, *Philonthus*, LeConte, 1863 [28]
haemorrhoidalis, *Philonthus*, Brancsik, 1893 [21]
haemorrhoidalis, *Philonthus*, MacLeay, 1873 [21]
haemorrhoidalis, *Staphylinus*, Fabricius, 1801 [15, 55]
haemorrhoidalis, *Staphylinus*, Germar, 1824 [55]
hirtipennis, *Quedius*, Broun, 1915 [45]
humilis, *Philonthus*, Cameron, 1932 [37]
humilis, *Philonthus*, Erichson, 1840 [37]
hybridus, *Philonthus*, Cameron, 1930 [38]
hybridus, *Philonthus*, Erichson, 1840 [38]
litoreus, *Staphylinus*, Broun, 1880 [18]
littoreus, *Staphylinus*, Linnaeus, 1758 [18]
marginatum, *Omalium*, Cameron, 1941 [5]
marginatum, *Omalium*, Say, 1832 [5]
marginatus, *Staphylinus*, Cameron, 1944 [51]
marginatus, *Staphylinus*, Müller, 1764 [51]
melanocephalus, *Oxyporus*, Kirshenblat, 1938 [10]
melanocephalus, *Staphylinus*, Fabricius, 1787 [Table 2, no. 2]
mimulus, *Philonthus*, Sharp, 1874 [19]
minutus, *Xantholinus*, Coiffait, 1962 [53]
montanus, *Philonthus*, Bernhauer, 1934 [23]
nigriceps, *Philonthus*, Eppelsheim, 1885 [39]
nigrum, *Omalium*, Coiffait, 1982 [6]
nigrum, *Omalium*, Gravenhorst, 1806 [6]

nitidulus, *Staphylinus*, Fabricius, 1781 [17]
nitidulus, *Staphylinus*, Gravenhorst, 1802 [17]
parvulus, *Oxytelus*, Mulsant & Rey, 1861 [14]
piceus, *Tachinus*, Cameron, 1932 [62]
piceus, *Xantholinus*, Cameron, 1926 [54]
picipennis, *Philonthus*, Heer, 1839 [24]
picipennis, *Philonthus*, Mäklin, 1852 [24]
propinquus, *Philonthus*, Cameron, 1933 [25]
propinquus, *Philonthus*, Sharp, 1876 [25]
punctatellus, *Philonthus*, Heer, 1839 [26]
punctatellus, *Philonthus*, Horn, 1884 [26]
punctipennis, *Staphylinus*, Solier, 1849 [22]
purpurascens, *Staphylinus*, Cameron, 1920 [43]
purpurascens, *Staphylinus*, Nordmann, 1837 [43]
pygmaeus, *Staphylinus*, Paykull, 1800 [Table 2, no. 1]
rivularis, *Philonthus*, Cameron, 1932 [40]
rivularis, *Philonthus*, Kiesenwetter, 1858 [40]
robustum, *Omalium*, Broun, 1911 [2]
robustum, *Omalium*, Heer, 1839 [2]
rufipennis, *Staphylinus*, Cameron, 1930 [52]
rufipennis, *Staphylinus*, Fabricius, 1801 [29, 52]
rufipennis, *Staphylinus*, Gravenhorst, 1802 [29, 52]
rufum, *Omalium*, Sachse, 1852 [3]
terminalis, *Staphylinus*, Erichson, 1839 [16]
terminalis, *Staphylinus*, Laporte, 1840 [16]
testaceus, *Staphylinus*, Fabricius, 1801 [31]
thoracicus, *Staphylinus*, Gravenhorst, 1802 [41]
tomentosus, *Staphylinus*, Gravenhorst, 1802 [44]
unicolor, *Quedius*, Kiesenwetter, 1847 [46]
viduus, *Philonthus*, Cameron, 1933 [27]
viduus, *Philonthus*, Erichson, 1840 [27]

Details of the above names placed on the Official List of Specific Names in Zoology are given in Tables 1 and 2 as follows:

- (a) the specific names in column 1 of Table 1, as originally published in binomina with the generic names in column 2, ruled in (1) above to be not invalid by reason of being junior primary homonyms of the names in column 3;
- (b) the valid specific names in column 3 of Table 1, as originally published in binomina with the generic names in column 2;
- (c) the specific names in column 1 of Table 2, as originally published in binomina with generic names in column 2, usage maintained under Article 23.9.2 as nomina protecta.

History of Case 3207

An application to conserve the use of 65 specific names for rove beetles (family STAPHYLINIDAE) was received from Dr Lee H. Herman (*American Museum of Natural*

History, New York, N. Y., U.S.A.) on 7 June 2001. After correspondence the case was published in BZN 59: 99–113 (June 2002). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received, but a correction was published in BZN 59: 281 amplifying the proposals to the Commission.

The specific names are now placed in several different genera but were junior primary homonyms when published. None of the species denoted by the homonyms has been considered congeneric since 1899. The conserved senior and junior homonyms are presented in Table 1 below. Senior homonyms marked with an asterisk * are invalid for the reasons cited in column 6 of Table 1 and Table 2 of the application. The three specific names presented in column 1 of Table 2 below are conserved as nomina protecta under Article 23.9.2.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 100. At the close of the voting period on 1 June 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Bouchet abstained, no votes were received from Böhme.

Original references

The following are the original references to the names in Table 1 and Table 2 below, placed on an Official List by the ruling given in the present Opinion [the author's name, date and page on which the name is published are given in the Tables]:

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- Bernhauer, M.** 1934. Beitrag zur Staphylinidenfauna Afrika's. *Revue de Zoologie et de Botanique Africaines*, **24**(3): 228–248.
- Bernhauer, M.** 1936a. Die Staphyliniden der Philippinen (Gattung *Oxytelus*). *Philippine Journal of Science*, **61**(1): 81–87.
- Bernhauer, M.** 1936b. Neue Staphyliniden vom belgischen Kongo. *Revue de Zoologie et de Botanique Africaines*, **29**(1): 21–28.
- Bernhauer, M.** 1937. Beitrag zur afrikanischen Staphylinidenfauna. *Annals and Magazine of Natural History*, (10)**20**: 289–315.
- Brancsik, K.** 1893. Beiträge zur Kenntniss Nossibés und dessen Fauna nach Sendungen und Mittheilungen des Herrn P. Frey . . . *Jahresheft des Naturwissenschaftlichen Vereines des Trencsiner Comitates*, **15**: 202–258.
- Broun, T.** 1880. *Manual of the New Zealand Coleoptera*, part 1. 651 pp. Hughes, Wellington.
- Broun, T.** 1911. Additions to the coleopterous fauna of the Chatham Islands. *Transactions of the New Zealand Institute*, **43**: 92–115.
- Broun, T.** 1915. Descriptions of new genera and species of Coleoptera. *New Zealand Institute Bulletin*, **1**(4): 267–346.
- Cameron, M.** 1920. New species of Staphylinidae from India. *Entomologist's Monthly Magazine*, **56**: 141–148, 214–220.
- Cameron, M.** 1926. New species of Staphylinidae from India. Part II. *Transactions of the Entomological Society of London*, **1925**: 341–372.
- Cameron, M.** 1929. New species of Staphylinidae from the Belgian Congo. *Revue de Zoologie et de Botanique Africaines*, **18**(1): 56–65.
- Cameron, M.** 1930a. Staphylinidae from British North Borneo, with descriptions of new species. *Journal of the Federated Malay States Museums*, **16**: 160–168.

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- Cameron, M.** 1932. *The fauna of British India including Ceylon and Burma. Coleoptera. Staphylinidae*, vol. 3. xiii, 443 pp. Taylor & Francis, London.
- Cameron, M.** 1933a. Fauna Sumatrensis. Staphylinidae. *Tijdschrift voor Entomologie*, **76**: 383–395.
- Cameron, M.** 1933b. Staphylinidae (Col.) from Mount Kinabalu. *Journal of the Federated Malay States Museums*, **17**(2): 338–360.
- Cameron, M.** 1941. Descriptions of new Staphylinidae (Coleopt.). *Proceedings of the Royal Entomological Society of London*, (B)**10**: 56–60, 142–147.
- Cameron, M.** 1943. New species of Staphylinidae (Col.) from Australia and New Guinea. *Annals and Magazine of Natural History*, (11)**10**: 336–354.
- Cameron, M.** 1944. Descriptions of new Staphylinidae (Coleoptera). *Proceedings of the Royal Entomological Society of London*, (B)**13**: 11–15, 49–52.
- Cameron, M.** 1950. Staphylinidae (Coleoptera Polyphaga). *Explorations du Parc National Albert. Mission G. F. de Witte, (1933–1935)*, **59**: 1–85.
- Casey, T.L.** 1894. Coleopterological notices. V. *Annals of the New York Academy of Sciences*, **7**: 281–606.
- Coiffait, H.** 1962. Nouveaux *Xantholinus* d'Afrique du Nord (Note préliminaire). *Comptes Rendus des Séances Mensuelles Société des Sciences Naturelles et Physiques du Maroc*, **28**: 73–74.
- Coiffait, H.** 1982. Contribution à la connaissance des Staphylinides de l'Himalaya (Népal, Ladakh, Cachemire). (Insecta: Coleoptera: Staphylinidae). *Senckenbergiana Biologica*, **62**: 21–179.
- Eppelsheim, E.** 1885. Beitrag zur Staphylinidenfauna West-Afrika's. *Deutsche Entomologische Zeitschrift*, **29**: 97–147.
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- Erichson, W.F.** 1840. *Genera et species Staphylinorum insectorum coleopterorum familiae*, (part 2). Pp. 401–954. Morin, Berolino.
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- Fabricius, J.C.** 1787. *Mantissa insectorum sistens eorum species . . .*, vol. 1. 348 pp. Christ. Gottl. Proft, Hafniae.
- Fabricius, J.C.** 1801. *Systema eleutheratorum secundum ordines . . .*, vol. 2. 687 pp. Bibliopolii Academici Novi, Kiliae.
- Fauvel, A.** 1903. Staphylinidae recueillis au Cameroun par le Dr. Yngve Sjöstedt. *Arkiv för Zoologi*, **1**: 235–244.
- Germar, E.F.** 1823. *Fauna insectorum Europae*, vol. 6. Pp. 1–25. Kuemmellii, Halae.
- Germar, E.F.** 1824. *Insectorum species novae aut minus cognitae, descriptionibus illustratae. Coleoptera*. xxiv, 624 pp. Hendelii, Halae.
- Germar, E.F.** 1825. *Fauna insectorum Europae*, vol. 11. Pp. 1–25. Kuemmellii, Halae.
- Gravenhorst, J.L.C.** 1802. *Coleoptera Microptera Brunsvicensia . . .* lxvi, 206 pp. Reichard, Brunsvigae.
- Gravenhorst, J.L.C.** 1806. *Monographia Coleopterorum Micropteorum*. 248 pp. Dieterich, Göttingae.
- Heer, O.** 1839. *Fauna Coleopterorum Helvetica*, vol. 1, part 2. Pp. 145–360. Orellii, Fuesslini et Sociorum, Turici.
- Horn, G.** 1884. Synopsis of the Philonthini of Boreal America. *Transactions of the American Entomological Society*, **11**: 177–244.
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- Kiesenwetter, E.A.H. von.** 1858. [New species]. In Kraatz, G., Beitrag zur Käferfauna Griechenlands. Zweites Stück: Palpicornia, Silphales, Scydmaenidae, Pselaphidae, Staphylinidae. *Berliner Entomologische Zeitschrift*, **2**: 37–67.

- Kirshenblat, J.** 1938. O nekotorykh dal'nevostochnykh zhukakh-stafilinakh. Trudy Gridobiologicheskoi Ekspeditsii zin Akademii Nauk 1934 g. na Iaponskoe More. *Vypusk*, **1**: 527–536.
- Laporte, F.L.** 1835. *Études entomologiques, ou description d'insectes nouveaux, et observations sur leur synonymie*. 159 pp., 4 pls. Méquignon-Marvis, Paris.
- Laporte, F.L.** 1840. *Histoire naturelle des insectes coléoptères*. vol. 1. cxxv. 324 pp. Duméril, Paris.
- Lea, A.M.** 1906. Descriptions of new species of Australian Coleoptera. Part VIII. *Proceedings of the Linnean Society of New South Wales*, **31**: 195–228.
- LeConte, J.L.** 1863. New species of North American Coleoptera. Part I. *Smithsonian Miscellaneous Collections*, **6**(167): 1–92.
- Linnaeus, C.** 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- MacLeay, W.J.** 1873. Notes on a collection of insects from Gayndah. *Transactions of the Entomological Society of New South Wales*, **2**: 79–205.
- Mäklin, F.G.** 1852. [New species and notes]. In von Mannerheim, C., Zweiter Nachtrag zur Käfer-Fauna der Nord-Amerikanischen Laender des Russischen Reiches. *Bulletin de la Société Impériale des Naturalistes de Moscou*, **25**(2): 283–387.
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- Müller, O.F.** 1764. *Fauna Insectorum Fridrichsdalina, sive methodica descriptio insectorum agri Fridrichsdalensis* . . . xxiv, 96 pp. Gleditschii, Hafniae & Lipsiae.
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- Nicolai, E.A.** 1822. *Dissertatio inauguralis medica sistens Coleopterorum species Agri Halensis* . . . 45 pp. Grunderti, Halae.
- Nordmann, A. von.** 1837. *Symbolae ad monographiam staphylinorum*. 167 pp. Academiae Caesareae Scientiarum, Petropoli.
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- Paykull, G. de.** 1800. *Fauna Suecica. Insecta*, vol. 3. 459 pp. Edman, Upsaliae.
- Sachse, C.T.** 1852. Neue Käfer. *Entomologische Zeitung herausgegeben von dem Entomologischen Vereine zu Stettin*, **13**: 115–127, 142–149, 454.
- Say, T.** 1832. [Untitled continuation of: Say, T. 1830. *Descriptions of new species of North American insects, and observations on some already described*], pp. 50–57. Say, Indiana.
- Sharp, D.S.** 1874. The Staphylinidae of Japan. *Transactions of the Entomological Society of London*, **1874**: 1–103.
- Sharp, D.S.** 1876. Contribution to an insect fauna of the Amazon Valley. Coleoptera, Staphylinidae. *Transactions of the Entomological Society of London*, **1876**: 27–424.
- Sharp, D.S.** 1889. The Staphylinidae of Japan. *Annals and Magazine of Natural History*, (6)**3**: 28–44, 108–121, 249–267, 319–334, 406–419, 463–476.
- Solier, A.J.J.** 1849. Orden III. Coleopteros. In Gay, C. *Historia fisica y politica de Chile. Zoologia*, **4**: 105–380, 414–511.
- Solsky, S.M.** 1868. Études sur les Staphylinides de Mexique. *Horae Societatis Entomologicae Rossicae*, **5**: 119–144.
- Stephens, J.F.** 1832. *Illustrations of British entomology*. . . *Mandibulata*, vol. 5. 240 pp. Baldwin & Cradock, London.
- Ullrich, W.G.** 1975. *Monographie der Gattung Tachinus Gravenhorst (Coleoptera: Staphylinidae)*. . . 365 pp. Christian-Albrechts-Universität, Kiel.

Table 1. 62 conserved valid specific names (junior primary homonyms, column 1) and the names of their senior primary homonyms (column 3), as originally published in binomina with the generic names in column 2, placed on the Official List of Specific Names in Zoology

KEY:

[] - Name in square brackets is the generic name currently in use

* - Names not currently used as the valid name for a species and therefore *not* placed on the Official List of Specific Names in Zoology

No - Reference number given in Table 1 of Application (BZN 59: 104–112)

No	Junior homonym (column 1)	Original generic name (column 2)	Senior homonym(s) (column 3)
Subfamily OMALIINAE			
1	<i>brevipenne</i> Motschulsky, 1860 (p. 545) [<i>Mannerheimia</i>]	<i>Omalius</i> Gravenhorst, 1802	* <i>brevipenne</i> Gyllenhal, 1810 (p. 234) [<i>Micralymma</i>]
2	<i>robustum</i> Broun, 1911 (p. 96) [<i>Omaliomimus</i>]	<i>Omalius</i> Gravenhorst, 1802	* <i>robustum</i> Heer, 1839 (p. 179) [<i>Eusphalerum</i>]
3	<i>rufum</i> Sachse, 1852 (p. 148) [<i>Omaliopsis</i>]	<i>Omalius</i> Gravenhorst, 1802	* <i>rufum</i> Gravenhorst, 1802 (p. 115) [<i>Acidota</i>]
4	<i>crassicornis</i> Lea, 1906 (p. 212) [<i>Omalius</i>]	<i>Omalius</i> Gravenhorst, 1802	* <i>crassicornis</i> Matthews, 1863 (p. 8650) [<i>Phyllodrepa</i>]
5	<i>marginatum</i> Cameron, 1941 (p. 58) [<i>Omalius</i>]	<i>Omalius</i> Gravenhorst, 1802	1. <i>marginatum</i> Say, 1832 (p. 50) [<i>Eusphalerum</i>] 2. * <i>marginatum</i> Kirby, 1837 (p. 89) [<i>Olophrum</i>]
6	<i>nigrum</i> Coiffait, 1982 (p. 151) [<i>Omalius</i>]	<i>Omalius</i> Gravenhorst, 1802	<i>nigrum</i> Gravenhorst, 1806 (p. 212) [<i>Phyllodrepa</i>]
7	<i>atrum</i> Casey, 1894 (p. 420) [<i>Phyllodrepa</i>]	<i>Omalius</i> Gravenhorst, 1802	<i>atrum</i> Heer, 1839 (p. 178) [<i>Eusphalerum</i>]
8	<i>denticolle</i> Sharp, 1889 (p. 475) [<i>Pycnoglypta</i>]	<i>Omalius</i> Gravenhorst, 1802	<i>denticolle</i> Beck, 1817 (p. 26) [<i>Megarthus</i>]
9	<i>concinus</i> Marsham, 1802 (p. 510) [<i>Xylodromus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>concinus</i> Gravenhorst, 1802 (p. 21) [<i>Philonthus</i>]
Subfamily OXYPORINAE			
10	<i>melanocephalus</i> Kirshenblat, 1938 (p. 529) [<i>Oxyporus</i>]	<i>Oxyporus</i> Fabricius, 1775	* <i>melanocephalus</i> Fabricius, 1793 (p. 534) [<i>Tachyporus</i>]
Subfamily OXYTELINAE			
11	<i>cornutus</i> Bernhauer, 1936a (p. 86) [<i>Anotylus</i>]	<i>Oxytelus</i> Gravenhorst, 1802	<i>cornutus</i> Gravenhorst, 1802 (p. 109) [<i>Platystethus</i>]
12	<i>atricapillus</i> Germar, 1825 (p. 4) [<i>Bledius</i>]	<i>Oxytelus</i> Gravenhorst, 1802	* <i>atricapillus</i> Nicolai, 1822 (p. 40) [<i>Oxytelus</i>]
13	<i>bicornis</i> Germar, 1823 (p. 15) [<i>Bledius</i>]	<i>Oxytelus</i> Gravenhorst, 1802	<i>bicornis</i> Olivier, 1811 (p. 615) [<i>Piestus</i>]
14	<i>parvulus</i> Mulsant & Rey, 1861 (p. 175) [<i>Carpelimus</i>]	<i>Oxytelus</i> Gravenhorst, 1802	* <i>parvulus</i> Melsheimer, 1844 (p. 41) [<i>Anotylus</i>]
Subfamily STAPHYLININAE			
15	<i>haemorrhoidalis</i> Fabricius, 1801 (p. 596) [<i>Belonuchus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. * <i>haemorrhoidalis</i> Gmelin, 1790 (p. 2036) [<i>Staphylinus</i>] 2. <i>haemorrhoidalis</i> Olivier, 1795 (genus 42, p. 11) [<i>Staphylinus</i>]
16	<i>terminalis</i> Laporte, 1840 (p. 176) [<i>Belonuchus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>terminalis</i> Erichson, 1839 (p. 396) [<i>Oligotergus</i>]
17	<i>nitidulus</i> Gravenhorst, 1802 (p. 27) [<i>Bisnius</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>nitidulus</i> Fabricius, 1781 (p. 337) [<i>Tachyporus</i>]
18	<i>litoreus</i> Broun, 1880 (p. 108) [<i>Cafius</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>litoreus</i> Linnaeus, 1758 (p. 422) [<i>Sepedophilus</i>]
19	<i>mimulus</i> Sharp, 1874 (p. 38) [<i>Cafius</i>]	<i>Philonthus</i> Stephens, 1829	* <i>mimulus</i> Rottenberg, 1870 (p. 30) [<i>Gabronthus</i>]

Table 1. Continued

No	Junior homonym (column 1)	Original generic name (column 2)	Senior homonym(s) (column 3)
20	<i>angustatus</i> Solier, 1849 (p. 320) [<i>Cheilocolpus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. * <i>angustatus</i> Schrank, 1781 (p. 233) [<i>Staphylinus</i>] 2. <i>angustatus</i> Geoffroy, 1785 (p. 172) [<i>Rugilus</i>] 3. * <i>angustatus</i> Paykull, 1789 (p. 36) [<i>Astenus</i>]
21	<i>haemorrhoidalis</i> Brancsik, 1893 (p. 220) [<i>Diatrechus</i>]	<i>Philonthus</i> Stephens, 1829	<i>haemorrhoidalis</i> MacLeay, 1873 (p. 140) [<i>Hesperus</i>]
22	<i>punctipennis</i> Solier, 1849 (p. 319) [<i>Endeius</i>]	<i>Staphylinus</i> Linnaeus, 1758	* <i>punctipennis</i> Lacordaire, 1835 (p. 409) [<i>Othius</i>]
23	<i>montanus</i> Bernhauer, 1934 (p. 237) [<i>Gabrius</i>]	<i>Philonthus</i> Stephens, 1829	* <i>montanus</i> Heer, 1839 (p. 277) [<i>Quedius</i>]
24	<i>picipennis</i> Mäklin, 1852 (p. 313) [<i>Gabrius</i>]	<i>Philonthus</i> Stephens, 1829	<i>picipennis</i> Heer, 1839 (p. 279) [<i>Quedius</i>]
25	<i>propinquus</i> Cameron, 1933a (p. 389) [<i>Gabrius</i>]	<i>Philonthus</i> Stephens, 1829	<i>propinquus</i> Sharp, 1876 (p. 176) [<i>Paederomimus</i>]
26	<i>punctatellus</i> Horn, 1884 (p. 215) [<i>Gabrius</i>]	<i>Philonthus</i> Stephens, 1829	<i>punctatellus</i> Heer, 1839 (p. 275) [<i>Quedius</i>]
27	<i>viduus</i> Cameron, 1933b (p. 346) [<i>Gabrius</i>]	<i>Philonthus</i> Stephens, 1829	<i>viduus</i> Erichson, 1840 (p. 506) [<i>Styngetus</i>]
28	<i>gratus</i> Cameron, 1943 (p. 342) [<i>Hesperus</i>]	<i>Philonthus</i> Stephens, 1829	<i>gratus</i> LeConte, 1863 (p. 38) [<i>Neobisnius</i>]
29	<i>rufipennis</i> Gravenhorst, 1802 (p. 40) [<i>Hesperus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>rufipennis</i> Fabricius, 1801 (p. 597) [<i>Belonuchus</i>]
30	<i>debilis</i> Cameron, 1950 (p. 28) [<i>Leptacinus</i>]	<i>Leptacinus</i> Erichson, 1839	<i>debilis</i> Erichson, 1839 (p. 336) [<i>Somoleptus</i>]
31	<i>testaceus</i> Fabricius, 1801 (p. 595) [<i>Nordus</i>]	<i>Staphylinus</i> Linnaeus, 1758	* <i>testaceus</i> Paykull, 1789 (p. 28) [<i>Lobrathium</i>]
32	<i>cognatus</i> Sharp, 1876 (p. 169) [<i>Paederomimus</i>]	<i>Philonthus</i> Stephens, 1829	<i>cognatus</i> Stephens, 1832 (p. 229) [<i>Philonthus</i>]
33	<i>aberrans</i> Cameron, 1932 (p. 111) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	<i>aberrans</i> Sharp, 1876 (p. 174) [<i>Paederomimus</i>]
34	<i>australis</i> Cameron, 1943 (p. 342) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	<i>australis</i> MacLeay, 1873 (p. 139) [<i>Hesperus</i>]
35	<i>bicolor</i> Fauvel, 1903 (p. 240) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	* <i>bicolor</i> Redtenbacher, 1849 (p. 710) [<i>Quedius</i>]
36	<i>binotatus</i> Gravenhorst, 1806 (p. 73) [<i>Philonthus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>binotatus</i> Gravenhorst, 1802 (p. 28) [<i>Heterothops</i>]
37	<i>humilis</i> Cameron, 1932 (p. 106) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	<i>humilis</i> Erichson, 1840 (p. 512) [<i>Neobisnius</i>]
38	<i>hybridus</i> Cameron, 1930a (p. 163) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	<i>hybridus</i> Erichson, 1840 (p. 432) [<i>Quedius</i>]
39	<i>nigriceps</i> Eppelsheim, 1885 (p. 112) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	* <i>nigriceps</i> Gemminger & Harold, 1868 (p. 590) [<i>Erichsonius</i>]
40	<i>rivularis</i> Cameron, 1932 (p. 138) [<i>Philonthus</i>]	<i>Philonthus</i> Stephens, 1829	<i>rivularis</i> Kiesenwetter, 1858 (p. 61) [<i>Erichsonius</i>]
41	<i>thoracicus</i> Gravenhorst, 1802 (p. 170) [<i>Philonthus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. * <i>thoracicus</i> Geoffroy, 1785 (p. 170) [<i>Paederidus</i>] 2. * <i>thoracicus</i> Villers, 1789 (p. 420) [<i>Staphylinus</i>]
42	<i>biguttatus</i> Bernhauer, 1937 (p. 304) [<i>Platydracus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>biguttatus</i> Linnaeus, 1758 (p. 422) [<i>Stenus</i>]
43	<i>purpurascens</i> Cameron, 1920 (p. 217) [<i>Platydracus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>purpurascens</i> Nordmann, 1837 (p. 47) [<i>Staphylinus</i>]

Table 1. Continued

No	Junior homonym (column 1)	Original generic name (column 2)	Senior homonym(s) (column 3)
44	<i>tomentosus</i> Gravenhorst, 1802 (p. 161) [<i>Platydracus</i>]	<i>Staphylinus</i> Linnaeus, 1758	* <i>tomentosus</i> Rossi, 1792 (p. 97) [<i>Sepedophilus</i>]
45	<i>hirtipennis</i> Broun, 1915 (p. 279) [<i>Quedius</i>]	<i>Quedius</i> Stephens, 1829	* <i>hirtipennis</i> Stephens, 1832 (p. 221) [<i>Philonthus</i>]
46	<i>unicolor</i> Kiesenwetter, 1847 (p. 75) [<i>Quedius</i>]	<i>Quedius</i> Stephens, 1829	* <i>unicolor</i> Stephens, 1832 (p. 224) [<i>Philonthus</i>]
47	<i>affinis</i> Solsky, 1868 (p. 126) [<i>Staphylinus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>affinis</i> Paykull, 1789 (p. 24) [<i>Atreucus</i>]
48	<i>auricomus</i> Cameron, 1929 (p. 65) [<i>Staphylinus</i>]	<i>Staphylinus</i> Linnaeus, 1758	* <i>auricomus</i> Brullé, 1842 (pl. 5, fig. 6) [<i>Glenus</i>]
49	<i>chrysis</i> Bernhauer, 1936b (p. 24) [<i>Staphylinus</i>]	<i>Staphylinus</i> Linnaeus, 1758	<i>chrysis</i> Gravenhorst, 1806 (p. 214) [<i>Glenus</i>]
50	<i>dimidiatus</i> Laporte, 1835 (p. 115) [<i>Staphylinus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. * <i>dimidiatus</i> Sahlberg, 1830 (p. 326) [<i>Philonthus</i>] 2. * <i>dimidiatus</i> Say, 1830 (p. 37) [<i>Philonthus</i>] 3. * <i>dimidiatus</i> Lacordaire, 1835 (p. 402) [<i>Philonthus</i>]
51	<i>marginatus</i> Cameron, 1944 (p. 11) [<i>Staphylinus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. <i>marginatus</i> Müller, 1764 (p. 23) [<i>Philonthus</i>] 2. * <i>marginatus</i> Ström, 1768 (p. 332) [<i>Philonthus</i>] 3. * <i>marginatus</i> Fabricius, 1775 (p. 226) [<i>Philonthus</i>] 4. * <i>marginatus</i> Geoffroy, 1785 (p. 169) [<i>Tachinus</i>] 176) [<i>Paederomimus</i>]
52	<i>rufipennis</i> Cameron, 1930b (p. 156) [<i>Staphylinus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. <i>rufipennis</i> Fabricius, 1801 (p. 597) [<i>Belonuchus</i>] 2. <i>rufipennis</i> Gravenhorst, 1802 (p. 40) [<i>Hesperus</i>] 3. * <i>rufipennis</i> Solier, 1849 (p. 317) [<i>Philonthus</i>]
53	<i>minutus</i> Coiffait, 1962 (p. 73) [<i>Xantholinus</i>]	<i>Xantholinus</i> Dejean, 1821	* <i>minutus</i> Lacordaire, 1835 (p. 417) [<i>Leptacinus</i>]
54	<i>piceus</i> Cameron, 1926 (p. 345) [<i>Xantholinus</i>]	<i>Xantholinus</i> Dejean, 1821	* <i>piceus</i> MacLeay, 1873 (p. 138) [<i>Zeteotomus</i>]
55	<i>haemorrhoidalis</i> Germar, 1824 (p. 34) [<i>Xanthopygus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. * <i>haemorrhoidalis</i> Olivier, 1795 (genus 42, p. 11) [<i>Staphylinus</i>] 2. <i>haemorrhoidalis</i> Fabricius, 1801 (p. 596) [<i>Belonuchus</i>] 3. * <i>haemorrhoidalis</i> Gmelin, 1790 (p. 2036) [<i>Staphylinus</i>]
56	<i> analis</i> Erichson, 1840 (p. 495) [<i>Xenopygus</i>]	<i>Philonthus</i> Stephens, 1829	* <i> analis</i> Heer, 1839 (p. 268) [<i>Gabrius</i>]
57	<i>bicolor</i> Laporte, 1835 (p. 115) [<i>Xenopygus</i>]	<i>Staphylinus</i> Linnaeus, 1758	1. * <i>bicolor</i> Paykull, 1789 (p. 21) [<i>Lesteva</i>] 2. * <i>bicolor</i> Gmelin, 1790 (p. 2027) [<i>Staphylinus</i>]
Subfamily TACHYPORINAE			
58	<i>apicalis</i> Erichson, 1839 (p. 250) [<i>Coproporus</i>]	<i>Tachinus</i> Gravenhorst, 1802	* <i>apicalis</i> Stephens, 1832 (p. 195) [<i>Tachinus</i>]
59	<i>fulvipes</i> Erichson, 1840 (p. 921) [<i>Tachinomorphus</i>]	<i>Tachinus</i> Gravenhorst, 1802	* <i>fulvipes</i> Stephens, 1832 (p. 195) [<i>Tachinus</i>]

Table 1. Continued

No	Junior homonym (column 1)	Original generic name (column 2)	Senior homonym(s) (column 3)
60	<i>axillaris</i> Erichson, 1839 (p. 261) [<i>Tachinus</i>]	<i>Tachinus</i> Gravenhorst, 1802	<i>axillaris</i> Gravenhorst, 1806 (p. 29) [<i>Lordithon</i>]
61	<i>brunneus</i> Ullrich, 1975 (p. 207) [<i>Tachinus</i>]	<i>Tachinus</i> Gravenhorst, 1802	<i>brunneus</i> Erichson, 1839 (p. 249) [<i>Coproporus</i>]
62	<i>piceus</i> Cameron, 1932 (p. 389) [<i>Tachinus</i>]	<i>Tachinus</i> Gravenhorst, 1802	1. <i>*piceus</i> Erichson, 1839 (p. 246) [<i>Coproporus</i>] 2. <i>*piceus</i> Stephens, 1829 (p. 268) [<i>Bryoporus</i>]

Table 2. Junior homonyms in column 1, as originally published in binomina with the generic names in column 2, conserved under Article 23.9.2 of the Code and placed on the Official List of Specific Names in Zoology

[] - Name in square brackets is the generic name currently in use

* - Names not currently used as the valid name for a species and therefore not placed on the Official List of Specific Names in Zoology

No - Reference number given in Table 2 of Application (BZN 59: 113)

No	Junior homonym (column 1)	Original generic name (column 2)	Senior homonym (column 3)
1	Subfamily OMALIINAE <i>pygmaeus</i> Paykull, 1800 (p. 410) [<i>Hapalaraea</i>] nomen protectum	<i>Staphylinus</i> Linnaeus, 1758	<i>*pygmaeus</i> Villers 1789 (p. 420) [<i>Staphylinus</i>] nomen oblitum
2	<i>melanocephalus</i> Fabricius, 1787 (p. 222) [<i>Phyllodrepa</i>] nomen protectum	<i>Staphylinus</i> Linnaeus, 1758	<i>*melanocephalus</i> Geoffroy, 1785 (p. 172) [<i>Staphylinus</i>] nomen oblitum
3	Subfamily STAPHYLININAE <i>cephalotes</i> Gravenhorst, 1802 (p. 22) [<i>Bisnius</i>] nomen protectum	<i>Staphylinus</i> Linnaeus, 1758	<i>*cephalotes</i> Gmelin, 1790 (p. 2036) [<i>Staphylinus</i>] nomen oblitum

OPINION 2054 (Case 3201)***Scarabaeus punctatus* Villers, 1789 (currently *Pentodon bidens punctatus*; Insecta, Coleoptera): specific name conserved**

Abstract. The Commission has ruled that the specific name of *Scarabaeus punctatus* Villers, 1789 (family SCARABAEIDAE, subfamily DYNASTINAE), which is a junior primary homonym of *S. punctatus* Linnaeus, 1758 (family SCARABAEIDAE, subfamily RUTELINAE), is conserved. Despite the homonymy both specific names have been used since publication and are currently in use; they have never been treated as congeneric and neither has been included in the original genus since 1798. The name *Pentodon bidens punctatus* (Villers) refers to and is currently used for a common Palaearctic rhinoceros beetle; *S. punctatus* Linnaeus, 1758, currently *Pelidnota punctata* (Linnaeus), refers to and is used for a common eastern North American chafer.

Keywords. Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; DYNASTINAE; RUTELINAE; *Pentodon bidens punctatus*; *Pelidnota punctata*; rhinoceros beetles; chafers; Mediterranean; eastern North America.

Ruling

- (1) Under the plenary power the specific name *punctatus* Villers, 1789, as published in the binomen *Scarabaeus punctatus*, is hereby ruled to be not invalid by reason of being a junior primary homonym of *Scarabaeus punctatus* Linnaeus, 1758.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Pelidnota* MacLeay, 1819 (gender: feminine), type species by monotypy *Scarabaeus punctatus* Linnaeus, 1758 (RUTELINAE);
 - (b) *Pentodon* Hope, 1837 (gender: masculine), type species by original designation *Scarabaeus punctatus* Villers, 1789 (DYNASTINAE).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *punctatus* Linnaeus, 1758, as published in the binomen *Scarabaeus punctatus* (specific name of the type species of *Pelidnota* MacLeay, 1819) (RUTELINAE);
 - (b) *punctatus* Villers, 1789, as published in the binomen *Scarabaeus punctatus* (specific name of the type species of *Pentodon* Hope, 1837) (not invalid by the ruling in (1) above) (DYNASTINAE).

History of Case 3201

An application to conserve the specific name of *Scarabaeus punctatus* Villers, 1789 (SCARABAEIDAE, DYNASTINAE) was received from Frank-Thorsten Krell (*Department of Entomology, The Natural History Museum, London, U.K.*) on 15 March 2001. After correspondence the case was published in BZN 59: 27–29 (March 2002). The title, abstract and keywords of the case were published on the Commission's website. A comment in support of the application was published in BZN 59: 203.

Despite the specific name being a junior primary homonym of *S. punctatus* Linnaeus, 1758 both specific names have been used since publication and are currently in use. They have never been treated as congeneric and neither has been included in the original genus since 1798. The name *Pentodon bidens punctatus* (Villers) refers to the west and central Mediterranean subspecies of a common Palaearctic rhinoceros beetle (DYNASTINAE); *Pelidnota punctata* (Linnaeus) refers to a common chafer occurring in the eastern part of the U.S.A. and southern Ontario (RUTELINAE).

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 28. At the close of the voting period on 1 June 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no votes were received from Böhme.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Pelidnota MacLeay, 1819, *Horae entomologicae: or essays on the annulose animals*, vol. 1, part 1, p. 158.

Pentodon Hope, 1837, *The Coleopterist's manual, containing the Lamellicorn insects of Linneus and Fabricius*, p. 92.

punctatus, Scarabaeus, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 350.

punctatus, Scarabaeus, Villers, 1789, *Caroli Linnaei entomologia, fauna Suecicae . . .*, vol. 1, p. 40, pl. 1, fig. 3.

OPINION 2055 (Case 3176)***Ptinus tectus* Boieldieu, 1856 (Insecta, Coleoptera): usage of the specific name conserved**

Abstract. The Commission has ruled that the specific name *Ptinus tectus* Boieldieu, 1856 for a well-known spider beetle (family ANOBIIDAE, subfamily PTININAE) of significant economic importance is to be treated as the specific name of a then new nominal species. Boieldieu proposed the name *P. tectus* as a replacement name for the junior primary homonym *Ptinus pilosus* White, 1846 (a dorcatomine anobiid from New Zealand) with which he had misidentified his new taxon.

Keywords. Nomenclature; taxonomy; Coleoptera; ANOBIIDAE; PTININAE; DORCATOMINAE; *Ptinus tectus*; spider beetles.

Ruling

- (1) Under the plenary power it is hereby ruled that *tectus* Boieldieu, 1856, as published in the binomen *Ptinus tectus*, is to be treated as the specific name of a then new nominal species.
- (2) The name *tectus* Boieldieu, 1856, as published in the binomen *Ptinus tectus* and as ruled in (1) above to be treated as the name of a then new nominal species, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 3176

An application for the conservation of the specific name of *Ptinus tectus* Boieldieu, 1856 for an economically important spider beetle (ANOBIIDAE, PTININAE) was received from S.E. Thorpe (*Department of Entomology, Auckland Museum, Auckland, New Zealand*) on 22 September 2000. After correspondence the case was published in BZN 59: 24–26. The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 59: 25. At the close of the voting period on 1 June 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Böhme.

Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:
tectus, *Ptinus*, Boieldieu, 1856, *Annales de la Société Entomologique de France*, (3)4: 652.

OPINION 2056 (Case 3186)***Squalus edwardsii* (currently *Haploblepharus edwardsii*; Chondrichthyes, Carcharhiniformes): attributed to Schinz, 1822 and *edwardsii* conserved as the correct original spelling of the specific name**

Abstract. The specific name of the puffadder shyshark *Haploblepharus edwardsii* is attributed to Schinz (1822) and *edwardsii* is conserved as the correct original spelling in place of *edwardsii*.

Keywords. Nomenclature; taxonomy; Chondrichthyes; SCYLIORHINIDAE; *Haploblepharus*; *Haploblepharus edwardsii*; puffadder shyshark.

Ruling

- (1) Under the plenary power it is hereby ruled that the name *edwardsii*, as published in the binomen *Squalus edwardsii*, is an incorrect original spelling of *edwardsii*.
- (2) The name *edwardsii* Schinz, 1822, as published in the binomen *Squalus edwardsii* [sic], is hereby placed on the Official List of Specific Names in Zoology.
- (3) The name *edwardsii* Schinz, 1822, as published in the binomen *Squalus edwardsii* and ruled in (1) above to be an incorrect original spelling of *edwardsii*, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 3186

An application to attribute the specific name of the puffadder shyshark *Haploblepharus edwardsii* to Schinz (1822) as the author and to conserve *edwardsii* as the correct original spelling was received from M.J.P. van Oijen (*Nationaal Natuurhistorisch Museum, Naturalis, Leiden, The Netherlands*) on 21 December 2000. After correspondence the case was published in *BZN* 58: 294–296 (December 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in *BZN* 58: 295. At the close of the voting period on 1 June 2003 the votes were as follows: 23 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, Štys abstained, no vote was received from Böhme.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:
edwardsii, *Squalus*, Schinz, 1822, *Das Thierreich eingeteilt nach dem Bau der Thiere als Grundlage ihrer Naturgeschichte und die vergleichende Anatomie*, vol. 2, p. 214.
edwardsii, *Squalus*, Schinz, 1822, *Das Thierreich eingeteilt nach dem Bau der Thiere als Grundlage ihrer Naturgeschichte und die vergleichende Anatomie*, vol. 2, p. 214.

OPINION 2057 (Case 3028)***Aphanius* Nardo, 1827 (Osteichthyes, Cyprinodontiformes): conserved**

Abstract. The Commission has ruled that the name *Aphanius* Nardo, 1827 for a genus of Palaearctic fishes (family CYPRINODONTIDAE) is conserved by the suppression of the name *Lebias* Goldfuss, 1820 which, with a single exception in 1895, had remained unused since 1846 until resurrected by Lazara in 1995. Few authors have followed Lazara in his use of *Lebias* which does not refer to the same taxon as *Aphanius*.

Keywords. Nomenclature; taxonomy; CYPRINODONTIDAE; *Aphanius*; *Cyprinodon*; *Lebias*; *Aphanius fasciatus*; *Cyprinodon variegatus*; tooth carps; freshwater; brackish water; Palaearctic.

Ruling

- (1) Under the plenary power the name *Lebias* Goldfuss, 1820 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Aphanius* Nardo, 1827 (gender: masculine), type species by subsequent designation by Jordan (1917) *Aphanius nanus* Nardo, 1827 (a junior subjective synonym of *Lebias fasciata* Valenciennes in Humboldt & Valenciennes, 1821), is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *fasciata* Valenciennes in Humboldt & Valenciennes, 1821, as published in the binomen *Lebias fasciata* (senior subjective synonym of the specific name of *Aphanius nanus* Nardo, 1827, the type species of *Aphanius* Nardo, 1827), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
 - (a) *Lebias* Goldfuss, 1820 (suppressed in (1) above);
 - (b) *Lebia* Oken, 1817 (a junior homonym of *Lebia* Latreille, 1802).

History of Case 3028

An application to conserve the name *Aphanius* Nardo, 1827 for a genus of Palaearctic fishes (family CYPRINODONTIDAE) by the suppression of the name *Lebias* Goldfuss, 1820 was received from Maurice Kottelat (*Route de la Baroche 12, Cornol, Switzerland*) and Alwyne Wheeler (*Department of Zoology, The Natural History Museum, London, U.K.*) on 20 September 1996. After correspondence the case was published in BZN 58: 110–115 (June 2001). The title, abstract and keywords of the case were published on the Commission's website. Nine comments in support of this case were published in BZN 59: 133–134.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 58: 113. At the close of the voting period on 1 June

2003 the votes were as follows: 23 Commissioners voted FOR the proposals, 1 Commissioner (Kerzhner) voted AGAINST, no vote was received from Böhme.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Aphanis Nardo, 1827, *Giornale di Fisica, Chimica, Storia naturale, Medicina ed Arti* (Pavia), Decade Seconde, **10**: 34, 39–40.

fasciata, *Lebias*, Valenciennes in Humboldt & Valenciennes, 1821, *Voyage aux régions équinoxiales du nouveau continent, fait en 1799, 1800, 1801, 1802, 1803 et 1804*, vol. 2, part 11, p. 160.

Lebia Oken, 1817, *Isis*, **1**: 1183.

Lebias Goldfuss, 1820, *Handbuch der Zoologie*, vol. 2, p. 16.

OPINION 2058 (Case 2661)**MACROPODINAE Hoedeman, 1948 (Osteichthyes, Perciformes): spelling emended to MACROPODUSINAE so removing the homonymy with MACROPODINAE Gray, 1821 (Mammalia, Marsupialia)**

Abstract. The Commission has ruled that the homonymy between MACROPODINAE (Osteichthyes, Perciformes, ANABANTIDAE) and MACROPODIDAE Gray, 1821 (Mammalia, Marsupialia) is removed by emending the fish name to MACROPODUSINAE by using the whole name of the type genus *Macropodus* Lacepède, 1801 as the grammatical stem in accordance with Recommendation 29A of the Code. The mammalian name (based on *Macropus* Shaw & Nodder, 1790) remains unchanged. The names of *Macropus* and of its type species, *M. giganteus* Shaw & Nodder, 1790, were placed on Official Lists in Opinion 760 (January 1966).

Keywords. Nomenclature; taxonomy; Mammalia; Marsupialia; Osteichthyes; Perciformes; ANABANTIDAE; MACROPODIDAE; MACROPODUSINAE; *Macropus*; *Macropodus*; kangaroos; wallabies; anabantoid fishes; labyrinth fishes; Australia; Tasmania; New Guinea; Southeast Asia.

Ruling

- (1) Under the plenary power it is hereby ruled that for the purposes of Article 29 of the Code the stem of the generic name *Macropodus* Lacepède, 1801 (Osteichthyes) is MACROPODUS-.
- (2) The name *Macropodus* Lacepède, 1801 (gender: masculine), type species by monotypy *Macropodus viridiauratus* Lacepède, 1801, is hereby placed on the Official List of Generic Names in Zoology (Osteichthyes).
- (3) The name *viridiauratus* Lacepède, 1801, as published in the binomen *Macropodus viridiauratus* (specific name of the type species of *Macropodus* Lacepède, 1801), is hereby placed on the Official List of Specific Names in Zoology (Osteichthyes).
- (4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
 - (a) MACROPODIDAE Gray, 1821, type genus *Macropus* Shaw & Nodder, 1790 (Marsupialia);
 - (b) MACROPODUSINAE Hoedeman, 1948, type genus *Macropodus* Lacepède, 1801 (spelling emended by the ruling in (1) above) (Osteichthyes).
- (5) The name MACROPODINAE Hoedeman, 1948 (spelling emended to MACROPODUSINAE by the ruling in (1) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (Osteichthyes).

History of Case 2661

An application to remove the homonymy between the family-group names MACROPODINAE Hoedeman, 1948 (Osteichthyes) and MACROPODIDAE Gray, 1821 (Mammalia) was received from Maurice Kottelat (*Department of Biological Sciences,*

National University of Singapore, Kent Ridge, Singapore; and Route de la Baroche 12, Cornol, Switzerland) on 28 April 1988. After correspondence the case was published in BZN **58**: 297–299 (December 2001). The title, abstract and keywords of the case were published on the Commission's website.

A comment correcting the author and date of the family-group name MACROPODINAE from Liem (1963) as published in the original application to Hoedeman (1948) was published in BZN **59**: 132–133.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposal published in BZN **58**: 298. At the close of the voting period on 1 June 2003 the votes were as follows: 24 Commissioners voted FOR the proposals, no Commissioners voted AGAINST, no vote was received from Böhme.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

MACROPODIDAE Gray, 1821, *London Medical Repository*, **15**: 308.

MACROPODINAE Hoedeman, 1948, *Encyclopaedie voor den aquariumhouder*, p. 2.

Macropodus Lacepède, 1801, *Histoire naturelle des poissons*, vol. 3, p. 416.

MACROPODUSINAE Hoedeman, 1948, *Encyclopaedie voor den aquariumhouder*, p. 2.

viridiauratus, *Macropodus*, Lacepède, 1801, *Histoire naturelle des poissons*, vol. 3, p. 416.

OPINION 2059 (Case 275)***Camelus* Linnaeus, 1758 (Mammalia, Artiodactyla): *Camelus bactrianus* Linnaeus, 1758 designated as the type species**

Abstract. The Commission has designated *Camelus bactrianus* Linnaeus, 1758 as the type species of the camel genus *Camelus* Linnaeus, 1758, to accord with modern usage. A 1904 designation of *C. dromedarius* Linnaeus, 1758 had never been adopted.

Keywords. Nomenclature; taxonomy; Artiodactyla; CAMELIDAE; *Camelus*; *Camelus bactrianus*; Bactrian camel.

Ruling

- (1) Under the plenary power all previous designations of type species for *Camelus* Linnaeus, 1758 are hereby set aside and *Camelus bactrianus* Linnaeus, 1758 is designated as the type species.
- (2) The name *Camelus* Linnaeus, 1758 (gender: masculine), type species by designation in (1) above *Camelus bactrianus* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *bactrianus* Linnaeus, 1758, as published in the binomen *Camelus bactrianus* (specific name of the type species of *Camelus* Linnaeus, 1758), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 275

There has long been confusion as to whether *Camelus bactrianus* Linnaeus, 1758 or *C. dromedarius* Linnaeus, 1758 was the valid type species of *Camelus* Linnaeus, 1758. In order to resolve this situation, N. Erridge (then of the Secretariat, International Commission on Zoological Nomenclature) reviewed the history of the name and prepared an application proposing that the Commission should rule that *C. bactrianus* is the type species and not *C. dromedarius* as had been designated by Palmer (1904), not Hay (1902) as stated in the application. This application was published in BZN 45: 141–142 (June 1988). Notice of the case was sent to appropriate journals. No comments on this case were received.

Decision of the Commission

On 1 March 2003 the members of the Commission were invited to vote on the proposals published in BZN 45: 141. At the close of the voting period on 1 June 2003 the votes were as follows: 22 Commissioners voted FOR the proposals, one Commissioner (Minelli) voted AGAINST, Alonso-Zarazaga abstained, no vote was received from Böhme.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

bactrianus, *Camelus*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 65.
Camelus Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 65.

Additional reference

Palmer, T.S. 1904. *North American fauna*, **23**: 156.

Book Review

Hooper, J.N.A. and van Soest, R.W.M. 2002. *Systema Porifera. A guide to the classification of Sponges*. 2 vols. Kluwer Academic/Plenum Publishers, New York, Boston, Dordrecht, London, Moscow. ISBN 0-306-47260-0.

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On occasions, a book appears which simply takes one's breath away (the last one that did it for me was Starr's *Prokaryotes*). *Systema Porifera* is one such work. It is an achievement that comes with an inherent sense of grandeur and destiny. It is a systematic treatment of the sponges and seeks to provide an even-handed and definitive coverage of the estimated 680 living genera and also point to about 1000 fossil forms (my tally is that the book covers 1800 genera or subgenera). It is multi-authored and extends for 2000 pages. This work has been assembled by the efforts of over 45 authors from 17 countries. Although the diversity of contributors could be a recipe for disaster, the editors have done an exceedingly good job in securing a consistency of approach.

The sponges are a taxonomically intimidating group—partly because of the difficulty of working on them, and because there are 15,000 living taxa. Not that every species is included, but all genera are included—most with reference to the type species. A volume such as this, which does its task so well, will bring taxonomic and nomenclatural stability to the discipline and provide a solid platform for future work. This compilation will be of great value to those studying the evolutionary and ecological significance of sponges (they greatly influenced the shape of the Earth through the formation of reefs, or offer the tantalizing ancestry to the epitheliate animals), or others who find their rich biochemical competency offers bio-prospecting opportunities—especially to the pharmaceutical industry.

The first volume deals with the general introduction and the Demospongiae. The second volume deals with Calcarea and Hexactinellidae—as well as those various fossil taxa that have sat in a slightly uncertain position relative to the sponges and other lower animals—such as the Sphinctozoa and Archaeocyatha. There is a chapter cataloguing the names of taxa that are even more obscure.

The work has a clear priority for the living (as opposed to extinct) sponges, but there is considerable cross reference to the fossil taxa—although this is kept under some greater control because of an upcoming volume on the fossil sponges within the *Treatise on Invertebrate Paleontology*. Within each taxon there is a statement as to its scope (what are the contained taxa), the synonymies, type species, separate definitions and diagnoses, and coverage of various aspects of biology such as distribution and geological age. Virtually all the extant genera are illustrated—often with pictures of type material (there is reference to material that was examined).

There used to be a tendency for taxonomists to be referred to in derogatory terms as 'stamp collectors'—a mantle since taken over by polypeptide or nucleic acid

sequencers. Yet, embedded within achievements like *Systema Porifera* is the framework that we can call upon to hang all associated information. This is especially timely as we now move into a new era of biodiversity bioinformatics—where Internet services will use compilations of names to index and integrate information that is accessible through the Internet; and even though the usual emphasis is on ‘species’, coverage that emphasizes the genus is commendable. This approach makes the task of working with a group as large as the sponges tractable. The availability of the names of genera provides the indexing structure that allows access to all species level information.

One minor gripe with *Systema Porifera* lies in the sections on synonymy. Possibly a consequence of the multi-author approach is that the concept of synonym is dealt with in different ways. So, we might get:

Erylus Gray 1876, with synonymies listed as *Erylus* Gray 1867a: 549; *Stelletta* (in Part) 1862: 46; *Scutastra* Ferrer-Hernández, 1912: 582.

Or in the case of *Aulospongus* Norman:

Aulospongus Norman, 1878: 267; Dendy, 1889: 89; Dendy, 1922b: 61; Burton, 1937: 38; Hooper, 1991: 1307; Hooper & Lévi, 1993: 1294; Hooper *et al.*, 1999: 651 (Not *Aulospongus*; de Laubenfels, 1936a: 100). *Aulospongiella* Burton, 1956: 141; *Heterectya* Hallmann, 1917b: 393. *Raphidectyon* Topsent, 1927b: 15, *Hemecytonilla* Burton, 1959a: 254. *Trachostylea* Topsent, 1928c: 166. Taxonomy decision for synonymy: Hooper (1991), Hooper *et al.* (1999), this work.

However, these examples reveal the stunning level of intellectual industry that underpins this book and from which it will gain its authority and its place in history. It is also evident that some of the contributors have included under ‘synonymy’ reference to papers where particular synonyms have been used. This creates uncertainty throughout the volumes as to whether we are really dealing with synonyms and authorities, or if reference is being made to publications—as is suggested by the occasional use of a letter after the date of publication.

Anything missing? Although I can understand why, I would really like to have had a section on the general biology of the sponges, a description of all the component parts, their variability and even a stab or two at building phylogenetic trees. Without this, statements along the lines of ‘dermalia are usually hexactines sometimes with rare pentactines while atrialia are scarce pentactines’ remain impenetrable. There are suggestions that the content will move to an electronic format and as classification tools of the ilk of ‘Platypus’ become more readily available, perhaps we will increasingly see a diversity of views about phylogeny become visible through the Internet.

So who should we applaud? Well, first there are the authors—Belinda Alvarez, Pat Bergquist, Radovan Borojevic, Nicole Boury-Esnault, Alex Cook, Steve Cook, Francoise Debrenne, R. Desqueyroux-Faúndez, Maria Díaz, Dirk Erpenbeck, Diego García-Bellido, Eduardo Hajdu, John Hooper, Michelle Kelly, Manfred Krautter, Cléa Lerner, Claude Lévi, Manuel Maldonado, Renata Manconi, Michäel Manuel, Larisa Menshenina, Guilherme Muricy, Thierry Perez, John Pickett, Andrzej Pisera, Roberto Pronzato, Henry Reiswig, Joachim Reitner, Klaus Rützler, Toufik Samaai, Michele Sarà, Baba Senowbari-Daryan, Konstantin Tachnik, Maria Uriz, Jean Vacelet, R.C. Valentine, Rob van Soest, Wallie de Weerd, Philippe Willenz, Benjamin Wheeler, and Gert Wörheide. The

load carried by individuals varies considerably, but of this group, bibliographic editor Philippe Willenz deserves special mention because of the extent and detail of the bibliographic coverage.

Then the two lead players John Hooper and Bob van Soest who must, I am sure, have many times wondered if they were doing the right thing (you were!) and of course the publishers (Kluwer/Plenum) also need to be applauded.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described . . .'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in BZN 59: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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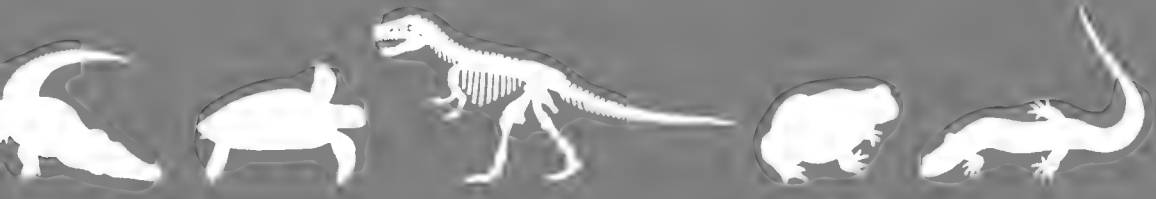
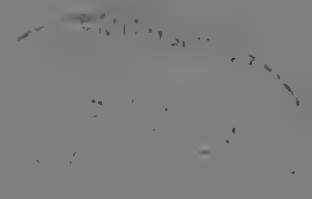
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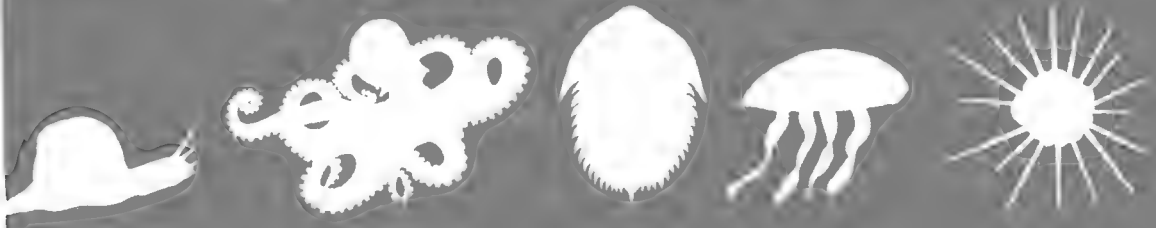
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on Zoological Nomenclature



THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume), as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be by e-mail to iczn@nhm.ac.uk where possible.

(2) The Commission votes on applications six to eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission via the Internet. To register free of charge with the Commission's Discussion List send an e-mail to 'join-iczn-list@lyris.bishopmuseum.org', leaving the subject line and body of the message blank (for further details see BZN 59: 234).

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 60, part 3, 30 September 2003) went to press. Under Article 82 of the Code, existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3291: DROMIINA Bonelli, 1810 (Insecta, Coleoptera): proposed emendation of spelling to DROMIINA to remove homonymy with DROMIIDAE De Haan, 1833 (Crustacea, Decapoda). Authors: T. Deuve, D. Guinot & J.-M. Bouchard (France).

CASE 3296: *Porcellio reaumurii* (currently *Hemilepistus reaumurii*; Crustacea, Isopoda): proposed conservation of the specific name and attribution to Milne Edwards, 1840. Author: L.B. Holthuis (The Netherlands).

CASE 3297: *Sphyaena acus* Lacepède, 1803 (currently *Tylosurus acus*; Osteichthyes): proposed reinstatement of priority over *Esox imperialis* Rafinesque, 1810 (currently *Belone imperialis*) by amendment of Opinion 900. Authors: B.B. Collette, N.V. Parin & P.P. Shirshov (U.S.A. & Russia).

CASE 3298: *Ceutorhynchus* Germar, 1824 (Insecta, Coleoptera): proposed conservation of two specific names. Author: D.V. Alford (U.K.).

CASE 3299: *Staphylinus punctulatus* Paykull, 1789 (currently *Gyrohypnus punctulatus*; Insecta, Coleoptera): proposed conservation. Author: V. Assing (Germany).

CASE 3300: *Halipegus occidualis* Krull, 1935 and *H. eccentricus* Thomas, 1939 (Digenea, Hemiuridae): proposed conservation. Author: D.F. McAlpine (Canada).

CASE 3301: TERMOPSIDAE Holmgren, 1911 (Insecta, Isoptera): proposed precedence over STOLOTERMITINAE Holmgren, 1910. Authors: M.S. Engel & K. Krishna (U.S.A.).

CASE 3302: *Buprestis sexsignata* Say, 1839 (Insecta, Coleoptera): proposed conservation of the specific name over those of *Chrysobothris ignipes* Gory & Laporte, 1838 and *C. germari* Gory & Laporte, 1838. Author: T.C. MacRae (U.S.A.).

The International Commission on Zoological Nomenclature and its publications

The roles of the International Commission on Zoological Nomenclature and of the International Trust for Zoological Nomenclature are described in the *Bulletin of Zoological Nomenclature*, vol. 60, pages 94–97 and 179–181, together with details of the following publications and how to obtain them:

Bulletin of Zoological Nomenclature,
International Code of Zoological Nomenclature,
Official Lists and Indexes of Names and Works in Zoology,
Towards Stability in the Names of Animals—a History of the International Commission on Zoological Nomenclature 1895–1995.

Full details will be found on the Commission's Website www.iczn.org.

DECLARATION 44

Amendment of Article 74.7.3

DECLARATION:

- (1) The wording of Article 74.7.3 is hereby amended to read ‘contain an express statement of deliberate designation (merely citing a specimen as “lectotype” is insufficient)’.
- (2) An Example is added directly below Article 74.7.3 to read ‘**Example.** A statement such as “lectotype hereby designated”, “lectotype by present designation”, “I choose specimen X as lectotype” would fulfil this requirement, but “lectotype: specimen X” would not’.
- (3) The following Recommendation is added to read ‘**Recommendation 74G. Not merely for curatorial purposes.** The designation of lectotypes should be done as part of a revisionary or other taxonomic work to enhance the stability of nomenclature, and not for mere curatorial convenience’.
- (4) These amendments are backdated and apply to all works published after 31 December 1999.

History of the proposal

A proposal to delete Article 74.7.3 of the Code was made (see BZN 58(2): 133; *Zoosystematica Rossica*, 10(1): 1–7) on the grounds that it was unnecessary and required repetitious statements to be made when several lectotypes were being designated in a revisionary work. The proposal was widely supported by zoologists (see BZN 58(2): 133–140). A draft proposal to amend Article 74.7.3 was published in BZN: 59(4): 278–279. On 8 April 2002, Commissioners were asked to vote on whether they considered the proposed amendments to constitute a minor change and asked to comment on the wording of the draft proposal. Over two-thirds of the Commissioners voted in agreement that it was a minor change to the Code and accepted the proposal’s wording (20 FOR, 3 AGAINST and 5 did not vote; see BZN: 59(4): 279–280). Under Articles 78.3 and 80.1 of the Code, a Declaration (provisional amendment to the Code) was drafted by the Executive Secretary and circulated to the Commission for its approval on 22 July 2003. The Declaration was approved and under Article 80.1 shall remain in force until ratified or rejected by the International Union of Biological Sciences (IUBS), the international body from which the Commission derives its functions and powers (Article 77 of the Code).

International Trust for Zoological Nomenclature

Financial Report for 2002

After 16 years as Executive Secretary of the International Commission on Zoological Nomenclature, Dr Philip Tubbs retired early in 2002 and the new Secretary is Dr Andrew Wakeham-Dawson. Mrs Anthea Gentry also left the Secretariat in May 2002 after serving as Zoologist for 14 years. These changes and new contracts for the remaining staff of the Secretariat led to a reduction in the salary costs of nearly £7,000 as compared with 2001. Nevertheless, the Trust had a deficit of £4,674 for the year (£60 less than in 2001), due mainly to the diminishing proceeds from both the 4th edition of the *International Code of Zoological Nomenclature* (£10,033), and from royalties on foreign translations of the *Code* (£3,245). £33,971 was received from sales of the *Bulletin of Zoological Nomenclature*, the *Official Lists and Indexes* and the *Centenary History of the Commission*. Interest and investment income of £9,647, together with £4,046 from donations and £2,004 capital gain from the sale of investments, brought the total income for the year to £62,946.

The main expenditures in 2002 were £55,375 for the salaries, fees and National Insurance of the Commission's Secretariat, and £10,185 for printing the *Bulletin of Zoological Nomenclature* and for the distribution of all publications. Other costs of £1,602 for office expenses and £458 for depreciation of office equipment brought the total expenditure to £67,620.

The main work of the Commission during the year was on applications from zoologists in 20 countries to resolve problems of zoological nomenclature. These were published in the *Bulletin of Zoological Nomenclature*, together with Opinions (rulings) made by the Commission on other cases. Further applications were under consideration. Advice was given by the Commission's Secretariat in response to a large number of informal enquiries on matters of nomenclature from zoologists worldwide.

The Commission's Secretariat was again housed in The Natural History Museum, London, whom we thank for their continuing support. The Trust wishes to express its thanks to the donors listed below who contributed to its work during the year. Continuation of the work of the Commission for the international zoological and palaeontological community is considerably helped by the support received from donors to the Trust.

M.K. HOWARTH

Secretary and Managing Director

7 April 2003

List of donations and grants received during the year 2002

American Association for Zoological Nomenclature	£3,385
Canadian Society of Zoologists	85
Royal Danish Academy of Sciences and Letters	116
Royal Entomological Society of London	300
Zoological Society of London	160

Total £4,046

**INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED
31 DECEMBER 2002**

Income

SALE OF PUBLICATIONS

Bulletin of Zoological Nomenclature	£30,551
International Code of Zoological Nomenclature	10,033
Royalties on Code	3,245
Official Lists and Indexes	3,279
Centenary History	141

 47,249

GRANTS AND DONATIONS

4,046

BANK AND INVESTMENT INTEREST

9,647

CAPITAL GAIN ON SALE OF INVESTMENTS

2,004

 62,946

Expenditure

SALARIES, NATIONAL INSURANCE AND FEES

55,375

OFFICE EXPENSES

1,602

PRINTING OF BULLETIN AND DISTRIBUTION OF
PUBLICATIONS

10,185

DEPRECIATION OF OFFICE EQUIPMENT

458

 67,620

Deficit for the year

£4,674

Case 3268***Conidophrys* Chatton & Lwoff, 1934 (Ciliophora, Pilisuctorida):
proposed conservation**

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Abstract. The purpose of this application, in relation to Article 23.9.3 of the Code, is the conservation of the widely used name *Conidophrys* Chatton & Lwoff, 1934 for a genus of pilisuctorid ciliates (family CONIDOPHRYIDAE Kirby, 1941) parasitic on marine crustaceans. The older name *Mycodinium* Averinzeff, 1916 is a probable subjective synonym, but it has never been used and its suppression is proposed.

Keywords. Nomenclature; taxonomy; Ciliophora; Pilisuctorida; CONIDOPHRYIDAE; *Conidophrys*; *Mycodinium*; *Conidophrys pilisuctor*; parasitic ciliates.

1. Averinzeff (1916, p. 183) described, illustrated and named *Mycodinium fucatum* n.g., n.sp., a protist parasitic on a marine amphipod belonging to the genus *Caprella* Lamarck, 1801; his work was entirely based on fixed material received from Trieste, Italy. Averinzeff was unsure about the taxonomic position of *M. fucatum* but considered that it was probably a dinoflagellate. His generic name remained unused until it was cited by Jankowski in 1989 (see para. 5 below); his specific name has never been used.

2. Chatton & Lwoff (1934, p. 697) described and illustrated the new genus and species *Conidophrys pilisuctor*, parasitic on the amphipod *Corophium acherusicum* Costa, 1857 at Sète, France. Chatton & Lwoff (p. 699) diagnosed a new family 'Pilisuctoridae' to contain *C. pilisuctor* as the only known species.

3. Kirby (1941) spelled Chatton & Lwoff's generic name as *Conidiophrys*, and pointed out that under the Code their family name 'Pilisuctoridae' was unavailable because it was not based on the name of a type genus. This remains true under Article 29.1 of the current Code (however, ordinal names such as Pilisuctorida and the vernacular term 'pilisuctorid' are not invalidated by the Code). Kirby (1941, p. 954) proposed the family name Conidiophryidae. Guilcher (1951) corrected Kirby's spellings but under Article 35.4.1, the valid family name is CONIDOPHRYIDAE Kirby, 1941 (and not Guilcher, 1951).

4. The literature on species of *Conidophrys* is very extensive (see for example Chatton & Lwoff, 1934, 1935, 1936; Guilcher, 1951; Raabe, 1964; Fenchel, 1965; Jankowski, 1966, 1972; Jones & Khan, 1970; Puytorac, 1994; Morado & Small, 1995; Dovgal, 1998; Boshko & Dovgal, 2000).

5. Jankowski (1989, p. 86) suggested in a brief purely nomenclatural note that *Conidophrys* Chatton & Lwoff, 1934 was a junior synonym of *Mycodinium* Averinzeff, 1916 and should therefore be replaced. He also stated that

CONIDOPHRYIDAE should be replaced by the new family name MYCODINIIDAE, but under Article 40.1 this would not be so even if *Mycodinium* were to be accepted as the valid senior subjective synonym of *Conidophrys*.

6. As mentioned above, the names *Conidophrys* and CONIDOPHRYIDAE have been in continuous and wide use for many years, but, apart from Jankowski's note, *Mycodinium* has not been used in any work since its original publication in 1916; to now replace *Conidophrys* by *Mycodinium* (in the family CONIDOPHRYIDAE) would cause confusion.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *Mycodinium* Averinzeff, 1916 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Conidophrys* Chatton & Lwoff, 1934 (gender: feminine), type species by original designation *Conidophrys pilisuctor* Chatton & Lwoff, 1934;
- (3) to place on the Official List of Specific Names in Zoology the name *pilisuctor* Chatton & Lwoff, 1934, as published in the binomen *Conidophrys pilisuctor* (specific name of the type species of *Conidophrys* Chatton & Lwoff, 1934);
- (4) to place on the Official List of Family-Group Names in Zoology the name CONIDOPHRYIDAE Kirby, 1941, type genus *Conidophrys* Chatton & Lwoff, 1934;
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Mycodinium* Averinzeff, 1916, as suppressed in (1) above.

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Acknowledgement of receipt of this application was published in BZN **60**: 94.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3281***Nahecaris* Jaekel, 1921 (Malacostraca, Phyllocarida, Archaeostraca): proposed precedence over *Dilophaspis* Traquair in Walther, 1903**

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Christoph Bartels

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Nahecaris* Jaekel, 1921 for a group of Lower Devonian phyllocarid crustaceans (order Archaeostraca) by giving it precedence over the older name *Dilophaspis* Traquair in Walther, 1903 whenever the two names are considered to be synonyms.

Keywords. Nomenclature; taxonomy; Phyllocarida; Archaeostraca; *Nahecaris*; *Dilophaspis*; *Nahecaris stuertzi*; *Dilophaspis lata*; Hunsrück Slate; Lower Devonian; Germany.

1. Traquair in Walther (1903, pp. 30–31) proposed the name *Dilophaspis lata* for a fossil from the Emsian of Rossbach (Hessen, Germany) that he interpreted as the dorsal shield of a cyathaspid (i.e. a heterostracan fish). The type species of *Dilophaspis* Traquair in Walther, 1903 (p. 30) by original designation is the new species *D. lata* Traquair in Walther, 1903. The single specimen reported was not figured. In 1942 Solle (p. 125, footnote) recorded the opinion of W. Gross that *D. lata* was not a fish but a large arthropod.

2. The new generic and specific names of *Nahecaris Stürtzi* (corrected to *N. stuertzi*) were proposed by Jaekel (1921, p. 290) for a fossil phyllocarid crustacean from the Lower Devonian roofing slates of Bundenbach and Gemünden. Due to the exceptional preservation of the limbs and other features in pyrite this taxon has become one of the most widely known fossil phyllocarids (Bartels et al., 1998).

3. In 1990 Hahn revised *Dilophaspis lata* and figured (for the first time) the holotype and only reported specimen. He demonstrated that it is a phyllocarid crustacean with strong similarities to the contemporaneous genus *Nahecaris* and pointed out that the discovery of more material of *D. lata* would probably demonstrate that it and *N. stuertzi* are only distinct at the specific level. Hahn (1990, p. 15) noted that ‘in this case, unfortunately, *Dilophaspis* has nomenclatural precedence, and the well known name *Nahecaris* becomes its younger subjective synonym’.

4. Brauckmann et al. (2002, p. 217) described a new species of phyllocarid from the Emsian of the Western Eifel and Luxembourg that they named *Dilophaspis frankei*. This species combines morphological characters of both *Dilophaspis* and *Nahecaris*

leading Brauckmann et al. to identify them as subjective synonyms. In their view 'this means that, unfortunately, *Dilophaspis* has nomenclatural precedence, whereas the well known and better understood name *Nahecaris* as its younger subjective synonym has to be suppressed' (Brauckmann et al., 2002, p. 216).

5. The genus *Nahecaris* from the Hunsrück Slate was redescribed by Bergström et al. (1987; 1989) who assigned specimens to *Nahecaris stuertzi*, *Nahecaris? balsi* Broili, 1930 and *Nahecaris* sp. In 2002 Rode & Liebermann emended the diagnosis of *Nahecaris* to include *Nahecaris bipennis* (Clarke, 1898) from the Middle Devonian of New York State extending its occurrence beyond the Hunsrück Slate.

6. The name *Dilophaspis* Traquair in Walther, 1903 has formal priority over *Nahecaris*. However, the taxon has been called *Nahecaris* since Jaekel described *N. stuertzi* in 1921. The identity of *Dilophaspis* as a crustacean, as opposed to a fish, was only confirmed in 1990 and it was not formally synonymized with *Nahecaris* until 2002. The reconstruction of *D. frankei* by Brauckmann et al. (2002, fig. 6), apart from the carapace, is based entirely on *N. stuertzi* from the Hunsrück Slate; only the carapace of *D. frankei* is known. The assertion by Brauckmann et al. (2002, p. 220) that *Nahecaris* does not meet the condition of Article 23.9.1.2 is incorrect. We have consulted over 40 works that mention *Nahecaris* (over half of them including reconstructions of the animal or illustrations of specimens) by over 40 different authors (many joint) published in the last 50 years (a list is held by the Commission Secretariat). Ironically, both Hahn (1990) and Brauckmann et al. (2002) stated that the name *Nahecaris* is 'well known' and expressed regret that *Dilophaspis* has precedence, yet neither approached the Commission with a proposal to give *Nahecaris* precedence. The use of *Dilophaspis* over *Nahecaris* would cause considerable confusion given the status of *Nahecaris* as one of the best and most completely known examples of a fossil phyllocarid. We therefore propose that *Nahecaris* be given precedence over *Dilophaspis* whenever these names are considered to be synonyms. However, in the unlikely event that future discoveries show that *Nahecaris* is not congeneric with *Dilophaspis*, both names would still be available to denote the two taxa.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Nahecaris* Jaekel, 1921 precedence over the name *Dilophaspis* Traquair in Walther, 1903 whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Nahecaris* Jaekel, 1921 (gender: feminine), type species by original designation *N. stuertzi* Jaekel, 1921, with the endorsement that it is to be given precedence over the name *Dilophaspis* Traquair in Walther, 1903 whenever the two names are considered to be synonyms;
 - (b) *Dilophaspis* Traquair in Walther, 1903 (gender: feminine), type species by original designation *D. lata* Traquair in Walther, 1903, with the endorsement that it is not to be given priority over the name *Nahecaris* Jaekel, 1921 whenever the two names are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *stuertzi* Jaekel, 1921, as published in the binomen *Nahecaris stuertzi* (specific name of the type species of *Nahecaris* Jaekel, 1921);
 - (b) *lata* Traquair in Walther, 1903, as published in the binomen *Dilophaspis lata* (specific name of the type species of *Dilophaspis* Traquair in Walther, 1903).

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Nahecaris stuertzi Jaekel, 1921. HS 322 Deutsches Bergbau-Museum Bochum (original of Bergström et al., 1987, fig. 2a and Bartels et al., 1998, fig. 102).

Case 3253***Libellula aenea* Linnaeus, 1758 (currently *Cordulia aenea*) and *L. flavomaculata* Vander Linden, 1825 (currently *Somatochlora flavomaculata*; Insecta, Odonata): proposed conservation of usage of the specific names by the replacement of the lectotype of *L. aenea* with a newly designated lectotype**

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Abstract. The purpose of this application is to conserve, under Article 74.1 of the Code, the current usage of the names of two dragonfly species. In 1758, Linnaeus established the name *Libellula aenea* for three specimens. These have subsequently been recognized as belonging to two species: *L. aenea* and *L. flavomaculata* Vander Linden, 1825. In 1956, Fraser designated one of Linnaeus's specimens as the lectotype of *L. aenea*. However, the specimen he designated was the one used by Vander Linden to denote his species *L. flavomaculata*. Fraser's action made *L. aenea* a senior objective synonym of *L. flavomaculata*. It is proposed that one of Linnaeus's specimens other than the one selected by Fraser be designated as the lectotype of *L. aenea*, thus conserving prevailing usage of both names.

Keywords. Nomenclature; taxonomy; Insecta; Odonata; CORDULIIDAE; *Cordulia aenea*; *Somatochlora flavomaculata*; dragonflies.

1. Linnaeus (1758, p. 544) established the nominal species *Libellula aenea* with a short description 'L. thorace aëneo-viridi'. He cited three references: (1) *Fauna Svecica* (Linnaeus, 1746); (2) *Historia insectorum* (Raius [Ray], 1710); and (3) *Insecten-Belustigung* (Rösel von Rosenhof, 1749). The habitat was given as 'Europa'. In *Fauna Svecica* (1746), Linnaeus had included three specimens in a series, giving them the numbers 768 (one male specimen) and 769 (one male and one female specimen). He described the two groups of specimens separately and was clearly aware of their different characters: '[769] Præcedentis simillima, sed alia'. Nevertheless, he evidently considered all three specimens to be so alike that in the 10th edition of *Systema Naturae* he introduced only one name, *Libellula aenea*, to cover numbers 768 and 769, in addition to the cited references. In the 12th edition of *Systema Naturae* (1767, p. 902) Linnaeus also included both numbers under the name *L. aenea*. A critical review of the Raius (1710) and Rösel von Rosenhof (1749) references reveals that they both relate to the species represented by specimen no. 769.

2. Vander Linden (1825) evidently recognized the problem arising from Linnaeus's use of the single name *L. aenea* for two different taxa, and (p. 19) introduced the

name *L. flavomaculata* to denote the taxon represented by number 768 (male specimen), leaving number 769 as *L. aenea*. Vander Linden's action in establishing a new nominal species was in agreement with Linnaeus's view of 1746 and was accepted by the majority of contemporary workers, particularly Charpentier (1840, p. 91), Hagen (1840, p. 41) and de Selys Longchamps (1840, pp. 67, 210; 1850, p. 73). Both names as established by Linnaeus (1758) and Vander Linden (1825) are in prevailing use (see para. 5 below).

3. McLachlan (1898) took a contrary view and argued that specimen no. 768 was the only specimen representing *L. aenea*, but concluded his discussion by saying that in the interests of avoiding an 'intolerable nuisance' he wished to avoid any nomenclatural correction. Many years later, Fraser (1956, pp. 20–21) took up McLachlan's interpretation of the name *L. aenea* as denoting only specimen no. 768 and stated 'the type of *L. aenea* Linn. is a male [no. 768] labelled as [*L. aenea*] by Linnaeus himself and now in the Linnean collection, London'. This is a lectotype designation under Article 74.5. He considered the species under no. 769 to be unnamed and (p. 20) introduced the new name *Cordulia linaenea*.

4. Longfield (1957) pointed out that the introduction of the name *C. linaenea* was not only unjustified but also unnecessary since there were earlier available names in the synonymy of *L. aenea*. No one has adopted the name *C. linaenea*. Buchholz (1967, p. 234) rejected the name *C. linaenea* in favour of *C. aeneaturfosa*, which he attributed to Förster, 1902. Comments by Jurzitza (1969) and Schmidt (1978) have prevented a wider acceptance of Fraser's (1956) and Buchholz's (1967) nomenclatural actions.

5. The current prevailing use of the names *S. flavomaculata* and *C. aenea* as understood by Vander Linden (1825) is well documented in the extensive dragonfly literature of Eurasia, especially in systematic catalogues of world dragonflies (e.g. Davies & Tobin, 1985, p. 62; Tsuda, 1991, p. 132; Bridges, 1994, p. VIII.18; Steinmann, 1997, p. 255), in all international Odonata journals (e.g. the *International Journal of Odonatology*; *Odonatologica*), in field guides and red lists as well as in numerous odonatological books and papers dealing with biology, ecology and zoogeography, in regional and national check lists and in identification keys. There is a minority of central and eastern European authors who have followed Buchholz and use *C. aeneaturfosa* to denote the species under the Linnean no. 769; they apply the name *C. aenea* to the taxon represented by specimen no. 768. At present, only Hungarian authors depart from the prevailing usage.

6. In order to maintain the broad agreement on the retention of the use of the names *C. aenea* and *S. flavomaculata* we propose that the Commission should set aside Fraser's (1956) lectotype designation for *Libellula aenea*, and designate instead the female specimen in Linnaeus's no. 769.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all type fixations for the nominal species *aenea* Linnaeus, 1758, as published in the binomen *Libellula aenea*, and to designate the female specimen no. 769 in the collection of the Linnean Society of London as the lectotype;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *aenea* Linnaeus, 1758, as published in the binomen *Libellula aenea* and as defined by the lectotype designated in (1) above;

- (b) *flavomaculata* Vander Linden, 1825, as published in the binomen *Libellula flavomaculata* and as defined by Linnean specimen no. 768 described in paras. 1 and 2 above.

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Case 3093**NEMONYCHIDAE Bedel, November 1882 (Insecta, Coleoptera): proposed precedence over CIMBERIDIDAE Gozis, March 1882, and *Cimberis* Gozis, 1881: proposed conservation of usage**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the usage of the weevil (CURCULIONOIDEA) family name NEMONYCHIDAE Bedel, 1882 (November) by giving it precedence over the senior name CIMBERIDIDAE Gozis, 1882 (March). In addition, it is proposed that current usage of the generic name *Cimberis* Gozis, 1881 is conserved by validating Kuschel's (1959) designation of *Rhinomacer attelaboides* Fabricius, 1787 as its type species.

Keywords. Nomenclature; taxonomy; CURCULIONIDAE; NEMONYCHIDAE; CIMBERIDIDAE; *Cimberis*; *Nemonyx*; *Rhinomacer attelaboides*; *Rhinomacer lepturoides*.

1. The generic name *Rhinomacer* Geoffroy, 1762 has been variously applied to species of two unrelated families of Coleoptera, causing grave confusion. Determining the correct application of *Rhinomacer* is a necessary prerequisite to dealing with the family-group names involved. The genus *Rhinomacer* was described by Geoffroy, 1762 (p. 269). He included eleven species that were described but, since the work was not binominal these were not given single specific names. In one case, he included a reference to a binomen, *Attelabus coryli* Linnaeus, 1758, but as he did not cite this name, the species is unavailable as type species. Gozis (1881, p. cxii) designated '*Rhinomacer violaceus* Scopoli (= *betuli* Fabricius)' as type species but, again, as neither name was cited by Geoffroy, they cannot be used. Geoffroy's work was suppressed for all nomenclatural purposes (Opinion 228, 1954) but, following a later examination of generic names (Kerzhner, 1991), *Rhinomacer* Geoffroy 1762 was placed on the Official Index of Rejected and Invalid Generic Names in Zoology (Opinion 1754, 1994), being suppressed for priority but not for homonymy.

2. A use of *Rhinomacer* Geoffroy is to be found in Müller (1764, p. xiii), with no species included. Kerzhner (1991, p. 124) considered *Rhinomacer* Geoffroy in Müller to be available from this publication, but not with the type species designated by Gozis (1881, p. cxii), since neither name given by Gozis was included. Later, Müller

(1776, p. 90) included 15 available species by name. One of these, *Rhinomacer coryli* Müller, 1776 (a junior synonym of *Curculio nitens* Scopoli, 1763), was designated as type species by Silfverberg (1978, p. 118). Since *Curculio nitens* Scopoli is the valid name of the type species of *Attelabus* Linnaeus, 1758, *Rhinomacer* Müller, 1776 (not Geoffroy) is a subjective synonym of *Attelabus* Linnaeus, 1758. Kerzhner (1991, p. 124) believed this designation to be invalid, since *Rhinomacer coryli* Müller is not a nominal species but a misidentification of *Attelabus coryli* Linnaeus, 1758. However, taking this as a deliberate use of a misidentification under the Code (see Articles 69.2.4 and 70.4.2) Silfverberg's reasoning can be accepted. Müller (1776) made no reference to earlier uses of the name, and it cannot be assumed that he was referring to *Rhinomacer* Geoffroy. Even if he was, since *Rhinomacer* Geoffroy is suppressed for the Principle of Priority, it cannot take precedence over *Rhinomacer* Müller, although the latter name is preoccupied by *Rhinomacer* Geoffroy.

3. Fabricius (1781, p. 199) described a new genus *Rhinomacer*, including a single species, *Rhinomacer curculioides* Fabricius, 1781, which is the type species by monotypy. No reference was made to earlier uses of the name, and it cannot be assumed that he was referring to *Rhinomacer* Geoffroy or *Rhinomacer* Müller. Fabricius's genus is a junior homonym of *Rhinomacer* Geoffroy, 1762, and is currently a synonym of *Mycterus* Clairville, 1798 in the family MYCTERIDAE Blanchard, 1845.

4. Fabricius (1787, p. 123) added a second species to his genus *Rhinomacer*, namely *R. attelaboides* Fabricius, 1787. *Rhinomacer* Fabricius, 1787 is a redescription of *Rhinomacer* Fabricius, 1781. Fabricius subsequently (1801, p. 429) described a third species, *Rhinomacer lepturoides* Fabricius (now in *Nemonyx* Redtenbacher, 1845 (p. 96), where it is type species by monotypy on p. 152). A fourth species, *Rhinomacer varius* Fabricius (1798, p. 164) has not been mentioned by other authors, and is incertae sedis; it will not be mentioned again in this paper.

5. Olivier (1807, pp. 450, 457) placed *Rhinomacer curculioides* Fabricius (the type species of *Rhinomacer* Fabricius, 1781) in the genus *Mycterus*. He noted that the genus originally included only the mycterid, but that Fabricius had subsequently included two non-congeneric species (both are now recognised as NEMONYCHIDAE Bedel, 1882 (p. 3). Olivier chose to use the name *Rhinomacer* (Olivier, 1807, p. 459) exclusively for the two nemonychid species *Rhinomacer attelaboides* Fabricius, 1787 (p. 123) and *Rhinomacer lepturoides* Fabricius, 1801 (p. 429). Olivier thus misidentified Fabricius's genus, since there is no clear evidence that he was creating a new genus.

6. In 1823 (col. 1136), Schoenherr designated the nominal species *Rhinomacer attelaboides* Fabricius, 1787 as the type species for '*Rhinomacer* Fabr. Oliv.'. He also created the family name RHINOMACERIDES, used by later authors for a genus *Rhinomacer* including *R. attelaboides* but not *R. curculioides*. It is evident that Schoenherr was using Olivier's concept of the genus, not that of Fabricius. Shuckard (1840, p. 53) used 'RHINOMACERIDAE Shuck.' for *Rhinomacer* Fabricius (containing *attelaboides*). Schoenherr's use was followed by Thomson (1859, p. 127), who changed the family name ending to RHINOMACERINA, cited Geoffroy as author of the genus, and stated the type species to be *R. attelaboides*. The family name RHINOMACERIDES Schoenherr, 1823 is unavailable, being based on a misidentified type genus.

7. In a general discussion of the different genera named *Rhinomacer* and of Fabricius's muddling nomenclatural procedures, Gozis (1881, p. cxii) proposed the new generic name *Cimberis* to replace *Rhinomacer* of Fabricius, 1787, not mentioning Olivier. No species is strictly mentioned in his treatment in connection with *Cimberis*, although he noted Fabricius's (1787) inclusion of *R. attelaboides* in *Rhinomacer*. *Rhinomacer* Fabricius, 1787 is nomenclaturally identical with *Rhinomacer* Fabricius, 1781. Therefore, *Cimberis* is a junior synonym of *Rhinomacer* Fabricius, 1781 and should be included in the synonymy of *Mycterus* Clairville, 1798 in MYCTERIDAE as an unnecessary replacement name. However, it has never been used in this sense, always being considered a member of the CIMBERIDIDAE or NEMONYCHIDAE.

8. The family name CIMBERIDAE (correctly CIMBERIDIDAE; see Kuschel, 1959) was proposed by Gozis (1882, p. 58) as a replacement name for RHINOMACERIDAE of authors. Strictly speaking, this name is a synonym of MYCTERIDAE Blanchard, 1845. However, it has been used in CURCULIONOIDEA either as a subfamily of NEMONYCHIDAE or as a family of its own, usually wrongly attributed to Bradley (1930, p. 261), which is just a later use.

9. The family-group name RHINOMACERINI continued to be used for a group including *Nemonyx* (e.g. Voss, 1931, p. 162), and *Rhinomacer* for a genus including *attelaboides* (e.g. Voss, 1932, p. 12). Anderson (1947, p. 515), followed by Hatch (1971, p. 335), correctly pointed out that *Rhinomacer* Fabricius, 1781 was a pythid (mycterid), but incorrectly retained *Cimberis* and CIMBERIDAE.

10. O'Brien & Wibmer (1982, p. 18) correctly identified *Cimberis* Gozis, 1881 as a pythid (presently MYCTERIDAE), following the logic expressed in paragraph 6 above. O'Brien & Wibmer (1982, p. 18) proposed the new name *Neocimberis* as a replacement name for the concept of *Cimberis* sensu auctt. in NEMONYCHIDAE and designated as type species *Rhinomacer attelaboides* Fabricius, 1787. However, *Neocimberis* is unavailable since, although replacement names can be proposed for available homonymic names, misidentified genera must be described as new and satisfy the provisions of Article 13 of the Code. *Cimberis* auctt. is a misidentification, and *Neocimberis* O'Brien & Wibmer lacks a description (Article 13.1.1) or a reference to such (Article 13.1.2). O'Brien & Wibmer (1982, p. 18) replaced CIMBERINI and RHINOMACERINI with the new name NEOCIMBERINI. This is also unavailable, since its type genus is unavailable.

11. Kuschel (1959, p. 234) cited as type species for *Cimberis* Gozis the nominal species *Rhinomacer attelaboides* Fabricius, 1787. Later, he (1989, pp. 132–133) suggested that (1) *Rhinomacer* Olivier, 1807 was, as a deliberate change from Fabricius's concept, nomenclaturally distinct, and applicable only to nemonychid weevils; (2) *Cimberis* Gozis had been proposed specifically and only for *Rhinomacer attelaboides*. Kuschel (1989) concludes: 'as a result, the author of *Rhinomacer* auctorum, or of authors, or of Fabricius, 1787 is a matter of course Olivier (1807). The name *Cimberis* is legitimate and valid for the nemonychid genus because it was proposed to replace *Rhinomacer* 'Fabricius 1787', which equals 'of authors', which equals Olivier, 1807, and because of a direct reference to *R. attelaboides* Fabricius.' This conclusion contravenes the Code dispositions, as shown above.

12. As shown in the previous paragraphs, *Rhinomacer attelaboides* Fabricius, 1787, a member of NEMONYCHIDAE or CIMBERIDIDAE, is not included in any valid genus. Despite O'Brien & Wibmer's actions, the genus name used almost exclusively since

Gozis (1881) is *Cimberis* and changing this situation would be against the stability of nomenclature. *Cimberis* has never been related to PYTHIDAE (MYCTERIDAE) other than in O'Brien & Wibmer (1982).

13. The family name CIMBERIDIDAE Gozis, 1882 was published on the 1st March while NEMONYCHIDAE Bedel, 1882 was published in November (to be dated on the 30th). If our proposal to conserve *Cimberis* Gozis in its current sense is accepted, CIMBERIDIDAE would have precedence over NEMONYCHIDAE. This procedure would upset the current nomenclature and so we propose that NEMONYCHIDAE should be given precedence over CIMBERIDIDAE. The family has been revised worldwide by Kuschel (1954, 1959, 1989, 1993, 1994) and he has used the name NEMONYCHIDAE.

14. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power:
 - (a) to rule that the family-group name NEMONYCHIDAE Bedel, 1882 (November) and other family-group names based on *Nemonyx* Redtenbacher, 1845 are to be given precedence over CIMBERIDIDAE Gozis, 1882 (March) and other family-group names based on *Cimberis* Gozis, 1881 whenever their type genera are placed in the same family-group taxon;
 - (b) to set aside all previous fixations of type species for the nominal genus *Cimberis* Gozis, 1881 prior to the designation made by Kuschel (1959) of *Rhinomacer attelaboides* Fabricius, 1787;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Cimberis* Gozis, 1881 (gender: feminine), type species by subsequent designation by Kuschel (1959) *Rhinomacer attelaboides* Fabricius, 1787;
 - (b) *Nemonyx* Redtenbacher, 1845 (gender: masculine), type species by monotypy *Rhinomacer lepturoides* Fabricius, 1801;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *attelaboides* Fabricius, 1787, as published in the binomen *Rhinomacer attelaboides* (specific name of the type species of *Cimberis* Gozis, 1881);
 - (b) *lepturoides* Fabricius, 1801, as published in the binomen *Rhinomacer lepturoides* (specific name of the type species of *Nemonyx* Redtenbacher, 1845);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) CIMBERIDIDAE Gozis, 1882, type genus *Cimberis* Gozis, 1881, with the endorsement that it and other family-group names based on *Cimberis* are not to be given priority over NEMONYCHIDAE Bedel, 1882 and other family-group names based on *Nemonyx* Redtenbacher, 1845 whenever their type genera are placed in the same family-group taxon;
 - (b) NEMONYCHIDAE Bedel, 1882, type genus *Nemonyx* Redtenbacher, 1845, with the endorsement that it and other family-group names based on *Nemonyx* Redtenbacher, 1845 are to be given precedence over CIMBERIDIDAE Gozis, 1882 and other family-group names based on *Cimberis* Gozis, 1881 whenever their type genera are placed in the same family-group taxon;
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:

- (a) *Rhinomacer* Fabricius, 1781 (a junior homonym of *Rhinomacer* Geoffroy, 1762);
- (b) *Neocimberis* O'Brien & Wibmer, 1982 (a nomen nudum);
- (6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the following names:
 - (a) RHINOMACERIDES Schoenherr, 1823 (based on a misidentified type genus);
 - (b) CIMBERIDAE Gozis, 1882 (an original incorrect spelling for CIMBERIDIDAE).

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Case 3272***Microsaurus* Dejean, 1833 (Insecta, Coleoptera): proposed conservation of usage by designation of *Staphylinus ochripennis* Ménétriés, 1832 as the type species**

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Abstract. The purpose of this application, in relation to Article 70 of the Code, is to conserve the widespread usage of the generic name *Microsaurus* Dejean, 1833 for a group of rove beetles (family STAPHYLINIDAE) by designating *Staphylinus ochripennis* Ménétriés, 1832 as the type species of *Microsaurus* in place of *Staphylinus lateralis* Gravenhorst, 1802. Members of the genus *Microsaurus* are north temperate in distribution, with the majority of species occurring in the Palearctic Region. The conservation of the long-standing usage of *Microsaurus* is required for the upcoming publication of the second volume of *The Catalogue of Palearctic Coleoptera*. *Quedius fissus*, *Q. latinus*, *Q. lateralis*, *Q. scheerpeltzi* (with synonym *Q. cyprinus*) and *Q. suramensis* (with synonym *Q. grouziacus*) are transferred from *Microsaurus* to *Raphirus* Stephens, 1829.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Microsaurus*; *Microsaurus ochripennis*; rove beetles; Holarctic; Palearctic.

1. Dejean (1833, p. 61) introduced the generic name *Microsaurus* for a group of rove beetles (family STAPHYLINIDAE) and included 11 available specific names, of which only three (*Staphylinus lateralis* Gravenhorst, 1802, *Staphylinus ochripennis* Ménétriés, 1832 (p. 145) and *Staphylinus scitus* Gravenhorst, 1806) currently remain in *Microsaurus*.

2. Westwood (1838, p. 16) subsequently designated one of the originally included species, *Staphylinus lateralis* Gravenhorst, 1802, as the type species of *Microsaurus*.

3. Stephens (1829, p. 23) established the rove beetle genus *Raphirus*, and Mulsant & Rey (1876, p. 616) established the rove beetle genus *Sauridus*. Both of these genera were subsequently included, together with *Microsaurus*, as subgenera of *Quedius* Stephens, 1829. Traditionally these three subgenera were distinguished by relative eye size until Smetana (1971, p. 184), showing this character to be inadequate for distinguishing between the three subgenera when considered in isolation from other characters, synonymized *Sauridus* with *Raphirus*.

4. Smetana (1988, p. 183) pointed out that all *Microsaurus* have two setiferous punctures posteromedial of the posterior frontal puncture on the head, whereas all *Raphirus* have only one setiferous puncture at this location. This character state is a reliable distinguishing character of the two subgenera irrespective of the size of the eyes (see Smetana, 1997, p. 51).

5. Since *Staphylinus lateralis* Gravenhorst, 1802 (p. 35), the type species of *Microsaurus*, has only one setiferous puncture in the location on the head (see para. 4 above), it has to be transferred to *Raphirus*, along with the following members of the *Quedius lateralis*-species group. These are: *Q. fissus* Gridelli, 1938, *Q. latinus* Gridelli, 1938, *Q. scheerpeltzi* Gridelli, 1938 (with its synonym *Q. cyprinus* Franz, 1987) and *Q. suramensis* Eppelsheim, 1880 (with its synonym *Q. grouziacus* Coiffait, 1966).

6. If the validly designated type species of *Microsaurus*, *Staphylinus lateralis*, remains the type species of *Microsaurus*, *Microsaurus* would become a junior synonym of *Raphirus* and the name *Ediquus* Mulsant & Rey, 1876 would replace *Microsaurus*. This would cause great confusion as the name *Ediquus* Mulsant & Rey, 1876 has not been used as a valid name for over 40 years and has a homonym *Ediquus* Reitter, 1887 (Coleoptera) (although this was replaced by the name *Farus* by Blackwelder in 1952, p. 165). Both *Microsaurus* and *Raphirus* have a long history of use in their current meaning, with each name being used by well over 20 authors since they were introduced (see Herman, 2001, pp. 3089–3090, for details) and these changes would seriously affect the nomenclatural stability of the group.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Microsaurus* Dejean, 1833 and to designate *Staphylinus ochripennis* Ménériés, 1832 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Microsaurus* Dejean, 1833 (gender: masculine), type species *Staphylinus ochripennis* Ménériés, 1832 as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *ochripennis* Ménériés, 1832, as published in the binomen *Staphylinus ochripennis* (specific name of the type species of *Microsaurus* Dejean, 1833).

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Case 3274***Hydroporus foveolatus* Heer, 1839 (Insecta, Coleoptera): proposed precedence of the specific name over *Hydroporus nivalis* Heer, 1839**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the specific name of *Hydroporus foveolatus* Heer, 1839 for a species of diving beetle (family DYTISCIDAE) from the mountains of central and western Europe, by giving it precedence over the senior synonym *Hydroporus nivalis* Heer, 1839. The two names had long been treated as synonyms until they were reconsidered to represent distinct species. For more than 100 years the name *H. foveolatus* has been used for the species described as *H. nivalis*. However, recent examination of their type specimens has confirmed that they are synonyms.

Keywords. Nomenclature; taxonomy; Coleoptera; DYTISCIDAE; *Hydroporus*; *Hydroporus foveolatus*; *Hydroporus nivalis*; Alps; Europe.

1. Heer (1839, p. 157) described two species of diving beetle, *Hydroporus nivalis* (species no. 17) and *H. foveolatus* (species no. 18) (family DYTISCIDAE), which were collected at several localities (Bergliseeli, Seeloch, Klausen, Gotthardseeli and Prunellenalp) in the Swiss Alps.

2. The two nominal species were considered to be synonyms by Schaum (1844, p. 197). Acting as First Reviser, he later used the name *Hydroporus nivalis* Heer, 1839 as the valid name for the taxon (Schaum, 1845, p. 406). For almost 50 years afterwards *H. foveolatus* Heer, 1839 was treated as a junior synonym of *H. nivalis* (e.g. Redtenbacher, 1858, p. 91; Gemminger & Harold, 1868, p. 437; Schaum, 1868, p. 67; Sahlberg, 1875, p. 150; Sharp, 1882, p. 469 and Seidlitz, 1887, pp. 73, 74).

3. Ganglbauer (1892, pp. 475, 476) resurrected the name *H. foveolatus* for the species described by Heer (1839) as *H. nivalis* and used the name *H. nivalis* for another species including among its synonyms *H. sabaudus* Fauvel, 1865 and *H. alticola* Sharp, 1882. Uncritical use of the names *H. foveolatus* and *H. nivalis* followed the interpretation established by Ganglbauer for more than a century (see Kolbe, 1899, p. 24; Zimmermann, 1920, pp. 87, 94; 1931, pp. 47, 48; Guignot, 1931–1933, pp. 349, 376; 1947, pp. 99, 104; Balfour-Browne, 1940, p. 340; Bertrand, 1949, p. 26; Zaitzev, 1953, p. 170; Schaefflein, 1971, p. 39; Galewski, 1971, pp. 26, 30; Franciscolo, 1979, pp. 331, 365; Angelini, 1984, pp. 62, 67; Guéorguiev, 1987, p. 70; Schaefflein & Wewalka, 1982, p. 8 and Nilsson, 2001, p. 163).

4. The synonymy of *Hydroporus foveolatus* and *H. nivalis* recognized by Schaum (1844, p. 197; 1845, p. 406) has been confirmed by recent examination of the type material and lectotypes of the two nominal species were designated by Shaverdo (2003, in press). The species that has been regarded as *H. nivalis* since Ganglbauer (1892) is currently known as *H. sabaudus* Fauvel, 1865. Comparison of the type specimens of *H. sabaudus* and its synonym *H. alticola* has confirmed *H. sabaudus* as a valid species (see Shaverdo, 2003). Accordingly, the species known for over 100 years as *H. foveolatus* sensu Ganglbauer (1892) would have to bear the name *H. nivalis*. These taxa are morphologically and ecologically very similar and often share the same habitat (high altitude lakes, pools and ditches). Using the name *H. nivalis* in the original sense would cause considerable confusion and instability in nomenclature and ecology. We therefore propose, in accordance with Articles 23.9.3 and 81.2.3, that the specific name *H. foveolatus* be given precedence over the name *H. nivalis* whenever the two are considered to be synonyms.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *foveolatus* Heer, 1839, as published in the binomen *Hydroporus foveolatus*, precedence over the name *nivalis* Heer, 1839, as published in the binomen *Hydroporus nivalis*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *foveolatus* Heer, 1839, as published in the binomen *Hydroporus foveolatus*, with the endorsement that it is to be given precedence over the name *nivalis* Heer, 1839, as published in the binomen *Hydroporus nivalis*, whenever the two are considered to be synonyms;
 - (b) *nivalis* Heer, 1839, as published in the binomen *Hydroporus nivalis*, with the endorsement that it is not to be given priority over the name *foveolatus* Heer, 1839, as published in the binomen *Hydroporus foveolatus*, whenever the two are considered to be synonyms.

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Case 3286***Thinobius crinifer* Smetana, 1959 (Insecta, Coleoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve, in relation to Article 23.9.3 of the Code, the specific name *Thinobius crinifer* Smetana, 1959 for a widespread Palaearctic species of rove beetle (family STAPHYLINIDAE). The name is threatened by the recently discovered synonymy with the largely unused senior name *Thinobius wenckeri* Fauvel, 1863 and three senior names whose description is based on specimens from North America, where the species was apparently introduced.

Keywords. Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Thinobius*; *Thinobius crinifer*; rove beetles; Holarctic.

1. The name *Thinobius crinifer* Smetana, 1959 (p. 271), described from Albania, was given to a widespread species of rove beetle (family STAPHYLINIDAE) that lives on sand and gravel banks of rivers and streams in large parts of the Palaearctic region. The species is of ecological and conservation interest. *Thinobius crinifer* has four older subjective synonyms.

2. The oldest name *Thinobius wenckeri* Fauvel, 1863 (p. 41), also described from Europe (France), was used as the name of a valid species only twice after its original description in the second half of the 19th century, the last time in 1868 (Gemminger & Harold, 1868, p. 654). Since the synonymization by Fauvel (1871, p. 164), *Thinobius wenckeri* Fauvel, 1863 has been considered either a synonym or an infrasubspecific form of *Thinobius longipennis* (Heer, 1841, p. 595). The synonymy of *Thinobius wenckeri* Fauvel, 1863 and *Thinobius crinifer* Smetana, 1959 was established by Schülke & Makranczy (2003), based on an examination of type material. Since *Thinobius wenckeri* Fauvel meets the provisions of Article 23.9.1, it has to be considered a nomen oblitum and *Thinobius crinifer* Smetana, 1959 a nomen protectum (Schülke & Makranczy, 2003).

3. Three other synonyms: *Thinobius tardus* Notman, 1921 (p. 149), *Thinobius amphibius* Notman, 1921 (p. 149) and *Thinobius grandicollis* Notman, 1921 (p. 150) were described from North America where the species appears to have been recently introduced. The synonymy of all the names described by Notman (1921) with *Thinobius crinifer* Smetana, 1959 was established by Schülke & Makranczy (2003) based on a study of type material. The names have been listed as valid only five times after their original descriptions in the papers of Scheerpeltz (1933, pp. 1126, 1127), Herman (1970, pp. 396, 397; 2001, pp. 1738, 1746, 1758), Moore & Legner (1975, pp. 254, 255) and Downie & Arnett (1996, p. 457) without any additional information. Only one of the references (Downie & Arnett, 1996) includes the species in an

identification key. An automatic suppression of all names described by Notman (1921) is not possible because they do not meet the provisions of Article 23.9.1.

4. In relation to the names published by Notman (1921), an automatic suppression of *Thinobius wenckeri* is not possible, because the provisions of Article 23.9.2 of the Code are not met in the case of *T. tardus*, *T. amphibius* and/or *T. grandicollis* (all listed as valid only four times during the last five decades).

5. However, *Thinobius crinifer* Smetana, 1959 was used as the valid name for the species from the time of its description and has been cited as valid in at least 41 articles by 28 authors in the last 50 years (Schülke & Makranczy, 2003; the Commission Secretariat holds these references). *Thinobius crinifer* Smetana is one of the most abundant Western Palaearctic species of the genus. The species name has frequently been used in the European taxonomic, zoogeographic and ecological literature, as well as in Red Data Lists and other papers dealing with nature conservation. To preserve continuity of the literature and to stabilize the name for use this case is submitted to the Commission under Article 23.9.3.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *tardus* Notman, 1921, as published in the binomen *Thinobius tardus*;
 - (b) *amphibius* Notman, 1921, as published in the binomen *Thinobius amphibius*;
 - (c) *grandicollis* Notman, 1921, as published in the binomen *Thinobius grandicollis*;
- (2) to place on the Official List of Specific Names in Zoology the name *crinifer* Smetana, 1959, as published in the binomen *Thinobius crinifer*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *tardus* Notman, 1921, as published in the binomen *Thinobius tardus* and as suppressed in (1) above;
 - (b) *amphibius* Notman, 1921, as published in the binomen *Thinobius amphibius* and as suppressed in (1) above;
 - (c) *grandicollis* Notman, 1921, as published in the binomen *Thinobius grandicollis* and as suppressed in (1) above;
 - (d) *wenckeri* Fauvel, 1863, as published in the binomen *Thinobius wenckeri* (a nomen oblitum).

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Case 3271***Nematois australis* Heydenreich, 1851 (currently *Adela australis*; Insecta, Lepidoptera): proposed precedence over *Tinea aldrovandella* Villers, 1789**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the widely used specific name *Adela australis* (Heydenreich, 1851) for a common south European fairy moth (family ADELIDAE) by giving it precedence over the questionable senior synonym *Tinea aldrovandella* Villers, 1789. *T. aldrovandella* was not used after publication until 1980 when it was mentioned as a possible synonym of *A. australis*. Since 1980, some, but not all, authors have accepted this synonymy.

Keywords. Nomenclature; taxonomy; ADELIDAE; *Adela australis*; *Tinea aldrovandella*.

1. Villers (1789, p. 526) described *Tinea aldrovandella* from Europe. The precise type locality of this species remains unknown, although it is quite likely that the type material originated from France as most of the comments by Villers concern species distributed in that country (Werneburg, 1864). The whereabouts of Villers's collection remains unknown (Nielsen, 1985), and the types are most probably lost.

2. The identity of *Tinea aldrovandella* has not been discussed in any subsequent work. This species belongs to the family ADELIDAE, as indicated by the character 'antennis longissimis'; the presence of a fascia excludes the genera *Nematopogon* Zeller and *Cauchas* Zeller from consideration. Eight of the 23 species of *Adela* Linnaeus and *Nemophora* Hoffmannsegg occurring in France (according to Leraut, 1997) possess a forewing fascia; in six species among them, the fascia is located in the middle of the forewing (between 0.5 and 0.6 of forewing length), which corresponds to the description ('fascia alba in medio'). The character 'alis violaceis' excludes three species with a brightly patterned forewing (*A. croesella* (Scopoli), *A. associatella* (Zeller), *N. congruella* Zeller), so only three species (*A. paludicolella* Zeller, *A. albicinctella* Mann, *A. australis* Heydenreich) more or less correspond to the original description. Two of these species (*A. paludicolella* and *A. albicinctella*) possess a small white spot at about 0.7 of the costa; in worn specimens this spot can easily be overlooked. The character 'Alae omneae, subtus fuscae, apice albae' is difficult to

attribute to any of the species mentioned. Therefore, we conclude that the identity of *T. aldrovandella* cannot be established with certainty, although *A. australis* (Heydenreich, 1851) seems to be the most plausible candidate.

3. Herrich-Schaeffer (1851, pl. 33, fig. 233) illustrated a male moth under the name *australis*. Herrich-Schaeffer's plates carry only specific names, which are not binominal and therefore not available; the descriptive text (on p. 103) did not appear until 1854 (see Hemming, 1937, p. 588 for the publication dates of vol. 5 of Herrich-Schaeffer's work). Although both the specific name and its application were due to Herrich-Schaeffer, the name was made available by reference to Herrich-Schaeffer's illustration by Heydenreich (1851, p. 131, published in the combination *Nematois australis*).

4. The name '*Tinea aldrovandella*' was not included in the comprehensive alphabetic list by Jung (1791) nor mentioned by either Hübner (1816–1825) or Herrich-Schaeffer (1855). Werneburg (1864, p. 234) was the only author to mention *Tinea aldrovandella* but indicating with the symbol '+' that the identity of the species was completely unknown. Subsequently, to the best of our knowledge, the name *aldrovandella* was not used after publication for any moth species until it was listed in a catalogue (Leraut, 1980), as a doubtful synonym of *A. australis*. At the same time, the name *australis* had been consistently used since 1851 by more than 20 authors, and it appeared in all major checklists and revisions (see Meyrick, 1912; Küppers, 1980; Vives Moreno, 1991, 1994; Karsholt & Razowski, 1996).

5. However, Rungs (1988) used the name *aldrovandella* as the senior synonym of *australis* in his checklist, without justifying this action. So far, to the best of our knowledge, only Leraut (1997) and Luquet (2000) have followed Rungs (1988).

6. In the interests of nomenclatural stability, we propose that the specific name of *Nematois australis* Heydenreich, 1851 be given precedence over that of *Tinea aldrovandella* Villers, 1789, whenever the two are synonyms.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *australis* Heydenreich, 1851, as published in the binomen *Nematois australis*, precedence over the name *aldrovandella* Villers, 1789, as published in the binomen *Tinea aldrovandella*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *australis* Heydenreich, 1851, as published in the binomen *Nematois australis*, with the endorsement that it is to be given precedence over the name *aldrovandella* Villers, 1789, as published in the binomen *Tinea aldrovandella*, whenever the two are considered to be synonyms;
 - (b) *aldrovandella* Villers, 1789, as published in the binomen *Tinea aldrovandella*, with the endorsement that it is not to be given priority over the name *australis* Heydenreich, 1851, as published in the binomen *Nematois australis*, whenever the two are considered to be synonyms.

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Case 3270**ISOMETRINAE Clark, 1917 (Echinodermata, Crinoidea): proposed emendation of spelling to ISOMETRAINAE to remove homonymy with ISOMETRINAE Kraepelin, 1891 (Arachnida, Scorpiones)**

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Abstract. The purpose of this application, under Articles 55 and 29 of the Code, is to remove the homonymy between the crinoid subfamily name ISOMETRINAE Clark, 1917 (type genus *Isometra* Clark, 1908; family ANTEDONIDAE) and the scorpion subfamily name ISOMETRINAE Kraepelin, 1891 (type genus *Isometrus* Ehrenberg in Hemprich & Ehrenberg, 1828; family BUTHIDAE). It is proposed that the entire generic name of *Isometra* should be adopted as the stem, so that the correct spelling of the crinoid subfamily will become ISOMETRAINAE Clark, 1917.

Keywords. Nomenclature; taxonomy; Crinoidea; Scorpiones; ANTEDONIDAE; BUTHIDAE; ISOMETRAINAE; ISOMETRINAE; *Isometra*; *Isometrus*; crinoids; scorpions.

1. The scorpion subfamily name ISOMETRINAE (family BUTHIDAE) was published by Kraepelin (1891, p. 6; as subfamily ISOMETRINI), based on the type genus *Isometrus* Ehrenberg in Hemprich & Ehrenberg, 1828 (plate I, fig. 3) (type species *Buthus* (*Isometrus*) *filum* Ehrenberg in Hemprich & Ehrenberg, 1828 (plate I, fig. 3) by monotypy (a junior synonym of *Scorpio maculatus* DeGeer, 1778 (p. 346), currently *Isometrus maculatus*)). The name *Isometrus* was published as a subgenus of *Buthus* Leach, 1815 (p. 391) (type species *Scorpio occitanus* Amoreux, 1789 (p. 43), currently *Buthus occitanus*, by original designation), and was elevated to rank of genus by Thorell (1876, p. 9). The well-known genus *Isometrus* includes over 20 species, some of them very common scorpions in the Oriental and Australasian regions (see Fet & Lowe, 2000); the type species *Isometrus maculatus* (DeGeer) is cosmopolitan. Many species of *Isometrus* have been actively studied in recent decades (e.g. Gysin & Le Corroller, 1968; Vachon, 1972; Armas, 1976; Kovařík, 1994, 1998). The name ISOMETRINAE Kraepelin, 1891 has been often used (always at subfamily rank) in taxonomic and biological works on BUTHIDAE (e.g. Birula (Byalynitskii-Birulya), 1917; Pavlovskij, 1924, 1925; Hoffmann, 1932; Mello-Leitão, 1934, 1945; Jaume, 1954; Bücherl, 1969, 1971; Aguilar & Meneses, 1970). Although subfamilies of BUTHIDAE are not well defined at this moment (see Sissom, 1990; Fet & Lowe, 2000), ISOMETRINAE Kraepelin, 1891 is among the oldest family-group names available in BUTHIDAE and will probably be used as a valid taxon name.

2. The crinoid subfamily name ISOMETRINAE Clark, 1917 (p. 6) (family ANTEDONIDAE) is based on the type genus *Isometra* Clark, 1908 (p. 133) (type species *Antedon challengerii* Clark, 1907 (p. 353), by original designation, currently *Isometra challengerii*). The name *Antedon challengerii* Clark, 1907 was published as a replacement name for *Antedon lineata* Carpenter, 1888 (p. 183, plate 13, figs. 4, 5), a junior homonym of *Antedon lineatus* Pomel, 1887 (currently *Palaeantedon lineatus*). The genus *Isometra*, though known chiefly from high southern latitudes and including only six species (two of which are known from single specimens), is one of the few crinoid genera that exhibit internal brooding, and includes the only living crinoid species in which skeletal modifications distinguish the sexes (e.g. John, 1938; Clark & Clark, 1967; Lawrence, 1987). As a result, members of the genus are among the few crinoid taxa in which early development has been investigated in any detail (Mortensen, 1920). As a result, the name ISOMETRINAE Clark, 1917 has been used regularly (always at subfamily rank) in taxonomic works on ANTEDONIDAE (e.g. Clark, 1918; Gislén, 1924; Clark & Clark, 1967; Rasmussen & Sieverts-Doreck, 1978). No synonyms exist in the family-group.

3. Under Article 55.3.1 the homonymy between ISOMETRINAE Kraepelin, 1891 (for scorpions) and ISOMETRINAE Clark, 1917 (for crinoids) must be referred to the Commission. In accordance with Recommendation 29A, we propose that the entire generic name *Isometra* should be adopted as the grammatical stem, so that the crinoid subfamily name will become ISOMETRAINAE and the homonymy will be removed. We are aware that this proposal may cause some problems for crinoid workers, but we can see no other resolution to the homonymy, short of ignoring Article 55.3.1 and accepting the homonymy. This, however, is likely to cause confusion during database searches.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that for the purposes of Article 29 of the Code the stem of the generic name *Isometra* Clark, 1908 is ISOMETRA-;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Isometrus* Ehrenberg in Hemprich & Ehrenberg, 1828 (gender: masculine), type species by monotypy *Buthus (Isometrus) filum* Ehrenberg in Hemprich & Ehrenberg, 1828 (Scorpiones);
 - (b) *Isometra* Clark, 1908 (gender: feminine), type species by original designation *Antedon challengerii* Clark, 1907 (Crinoidea);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *maculatus* DeGeer, 1778, as published in the binomen *Scorpio maculatus* (senior synonym of *Buthus (Isometrus) filum* Ehrenberg in Hemprich & Ehrenberg, 1828, the specific name of the type species of *Isometrus* Ehrenberg in Hemprich & Ehrenberg, 1828) (Scorpiones);
 - (b) *challengerii* Clark, 1907, as published in the binomen *Antedon challengerii* (specific name of the type species of *Isometra* Clark, 1908) (Crinoidea);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) ISOMETRINAE Kraepelin, 1891, type genus *Isometrus* Ehrenberg in Hemprich & Ehrenberg, 1828 (Scorpiones);
 - (b) ISOMETRAINAE Clark, 1917, type genus *Isometra* Clark, 1908 (spelling emended by the ruling in (1) above) (Crinoidea);

- (5) to place on the Official List of Rejected and Invalid Family-Group Names in Zoology the name ISOMETRINAE Clark, 1917 (an incorrect original spelling of ISOMETRAINAE, as ruled in (1) above) (Crinoidea).

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Comment on *Zoological Record* and registration of new names in zoology
(General Article; see BZN 60: 7–11)

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The proposal presented in this article to register all new zoological names is a welcome addition to the initiatives to bring taxonomic practices into the informatics age (see Agosti & Johnston, 2002; Godfray, 2002; Patterson, 2003). Implementation of this strategy would bring the informatics base for animals closer to the situation that prevails for viruses, bacteria, plants, algae and fungi, where similar developments have allowed both taxonomists and others who use names to take better advantage of the informatics world.

‘Compilations of names’ are a key step in the realization of other visions of greatly enhanced access to information about organisms (Patterson, 2003). The value of names compilations has been recognized by a variety of groups (Ruggiero et al., 2002) and agencies, such as GBIF, ITIS, and Species2000. Most compilations currently being assembled serve to catalogue our biodiversity or to provide reference materials for the community of taxonomists. It is more rare to find initiatives that capitalize on the informatics value of taxonomy.

A number of developments are needed to allow biodiversity bioinformatics to make progress. Future strategies must not be conceived as databases but in the context of Internet computing (Stein, 2002). We need openly accessible, non-partisan repositories of names of plants, fungi and microorganisms, as well as of animals. New structures will need to reconcile alternative (whether formal or colloquial) names for the same entities, be respectful of nomenclatural protocols, and accommodate divergent hierarchical classifications. Additional benefits emerge if a distinction is made between names (where the strongest informatics signal lies) and the more subjective elements of taxonomy such as classification schemes (where most of the noise lies) (Pullan et al., 2000). Structures with these features have been available—but they have not been drawn together beyond the conceptual level. We are of the view that the critical step in releasing the potential for biodiversity bioinformatics is the development of name servers that meet the criteria listed above.

Name servers are devices that manage information about biological names and classifications, of which the Taxonomic Name Server (TNS) of the Universal Biological Indexer and Organizer (uBio) project is a good example. The uBio project is based at the Marine Biological Laboratory and Woods Hole Oceanographic Institution Library (MBL/WHOI Library) in Woods Hole, Massachusetts, U.S.A., where it is supported by the Andrew W. Mellon Foundation (<http://www.ubio.org>). The project emerged alongside initiatives to digitize resources within biological literature. As any and all collections of biological information possess an internal index of names, the project sought to call upon names to create pathways to associated data. By including classificatory structures, we can enhance the biological

context of these pathways. The result was a name server using names and classification as devices to access, index and organize biological information.

uBio's Taxonomic Name Server (TNS) embraces but transcends the nomenclatural traditions of microbiology, botany and zoology. It fulfils the normal thesaural expectations of name servers in mapping alternative names for taxa against each other. It separates names from the classification systems with which they are normally associated. Consequently, the name server is neither limited to nor needs to endorse a single classification, but can operate with many co-existing classifications. Without a dependency on classification structures, the system can acquire names that are not placed within any classification but still have informatics potential—such as indexes to holdings in museums or herbaria.

The TNS data model has three broad domains: one for objective nomenclatural information (names, authorities, publications), the second for subjective elements of taxonomy (the ranks assigned to names, synonymies, and hierarchical classifications), and the third relates to management and maintenance of the content and contributions. The last dimension reflects our dependency on the expertise of numerous taxonomists for the content and organizational principles of TNS, and for moulding the structure in which the data resources are placed. In addition to holding data on names and classifications, TNS also documents and credits the origins of data and opinions and provides a return to the taxonomic community by transforming taxonomic knowledge into valuable organizational services.

TNS is currently being populated with the names of all genera and with collective name indexes provided by a large number of individual and institutional collaborators. Because of its potential value to bibliographic enterprises, the uBio project is also committed to the incorporation of older and colloquial names and to this end is co-operating in the conversion of Neave's *Nomenclator Zoologicus* to an electronic format.

From our point of view, the tradition of separating the nomenclature of animals (and other organisms treated as animals) from the nomenclature of plants is no longer desirable. This tradition has sociological and logistical foundations. The defense of these traditions is likely to lead to new informatics tools with the same aims, but which achieve these aims in different ways. Many services that call upon biological information, such as collective indices and authority lists already employed within libraries, information providers, or in molecular databases, are blind to these boundaries. So too are many groups responsible for the monitoring and management of our biodiversity and renewable natural resources who need tools to access information on the appearance, occurrence, and distribution of, and threats to, all types of organisms.

The integration of the concept proposed by Thorne with a name server brings considerable advantages beyond those envisaged for zoology. The first is the capacity for an immediate conversion of catalogues of names into tools capable of drawing together information about organisms to serve the needs of researchers, educators, and decision makers. Second, the placement of zoological names within a universal names compendium allows progress within a global rather than a parochial context. A comprehensive names compilation has nomenclatural advantages, for example eliminating the excuse for all future homonyms, and overcoming many of the problems associated with names of organisms that are only arguable plants or

animals and so fall into the ambiregnal category (Corliss, 1995; Patterson, 1986). Finally, these structures will serve the needs of taxonomists by improving access to information and by providing evidence of the value of taxonomy and of taxonomists.

Estimates that it may take 10 years to compile a list of all names seem to be based on the presumption that the initial steps for aggregating names require expert quality control (Patterson, 2003). This limits the rate of names aggregation. The uBio names acquisition strategy includes three key elements to allow more rapid progress. The first is the separation of objective from subjective elements of taxonomy. Second, we place the quality control step after the compilation of names. This eliminates the rate-limiting step while retaining most of the potential of names as indexing and organizing structures. Finally, our strategy to collect generic names first, coupled with the development of software tools capable of folding in specific names from other names lists, can achieve a unified compilation of all names in current use within the foreseeable future. The only impediment will be the willingness of key bodies to share their names information.

In this regard, we are pleased to note that *Zoological Record* has addressed concerns of access to names in committing continuing access to the Index to Organism Names (<http://www.biosis.org.uk/ion>), and more generally the enthusiasm to share their resources with other names and biodiversity initiatives. We urge the Commission to support this offer, and to promote its extension to all organisms.

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Comment on the proposed conservation of the specific name of and designation of a neotype for *Spongia ventilabrum* Linnaeus, 1767 (currently *Phakellia ventilabrum*; Porifera)

(Case 3216; see BZN 60: 16–19)

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As the result of a misunderstanding at the proof stage of this application, the Commission Secretariat introduced an error. Although Linnaeus (1767) originally spelt the specific name *ventilabra*, Johnson (1842) changed it to *ventilabrum*. Subsequently Johnson's spelling has prevailed (see Article 33.3.1 of the Code; the Secretariat holds a list of 28 references that show prevailing usage). Accordingly, we make the following corrections to para. 11 of our application:

(2) . . . type species by original designation *Spongia ventilabrum* Linnaeus, 1767;

(3) to place on the Official List of Specific Names in Zoology the name *ventilabrum*, as published in the binomen *Spongia ventilabrum* Linnaeus, 1767 . . .

Comments on the proposed conservation of *Melania curvicostata* Reeve, 1861 and *Goniobasis paupercula* Lea, 1862 (Mollusca, Gastropoda) by the designation of a neotype for *Melania curvicostata* (Reeve, 1861)

(Case 3232; see BZN 60: 109–112)

(1) Wallace E. Holznagel

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I fully support the application to set aside all previous type fixations and designate the specimen Florida Museum of Natural History 292208 as the neotype of *Melania curvicostata* Reeve, 1861 and to place on the Official List of Specific Names in Zoology the specific names of *M. curvicostata* and *Goniobasis paupercula* Lea, 1862. At present there is considerable interest and research in the molluscan fauna of the southeastern United States, which is considered to be a hot spot of freshwater biological diversity. To understand adequately the biodiversity of this region or any region and make informed conservation recommendations researchers need type material that truly reflects the original species description.

The following four correspondents (2)–(5) have all pointed out the same Code-compliant resolution to this case.

(2) L.B. Holthuis

National Museum of Natural History, Naturalis, P.O. Box 9517, 2300 RA Leiden, The Netherlands

It is stated in the application that the specimen figured as *Melania curvicostata* by Reeve, 1861 is different from all the existing syntypes and probably is the only one of

the type series to belong to the species currently known as *Elimia curvicostata*. The Commission has been asked to use the plenary power to designate a neotype for this species. Would it not be more logical for the authors to select the figured specimen (Reeve, 1861, pl. 58, species 462) as the lectotype to fix the identity of the species in the way wanted by the authors without action by the Commission? This can be done in relation to Article 74.4 of the Code.

(3) Arthur E. Bogan

North Carolina State Museum of Natural Sciences, Research Laboratory, 4301 Reedy Creek Road, Raleigh, NC 27607, U.S.A.

There is no confusion between the two taxa *E. curvicostata* from Georgia and Florida and *E. paupercula* from creeks in northern Alabama (e.g. Tryon, 1873, pp. 192, 292; Burch & Tottenham, 1980, pp. 136, 137, 140, 141; Thompson, 1984, pp. 25–27). Thompson & Mihalcik presented no evidence of any previous assumption of holotype or designation of a lectotype for *Melania curvicostata* Reeve, 1861. The designation of the figured syntype of *M. curvicostata* as the lectotype would fix the identity of the species clearly illustrated by Reeve (see Articles 72.5.6; 74.4 of the Code).

Additional reference

Tryon, G.W. Jr. 1873. Land and fresh-water shells of North America. Part 4. Strepomatidae (American melanians). *Smithsonian Miscellaneous Collections*, **16**: 1–435.

(4) Daniel L. Graf

The Academy of Natural Sciences, Philadelphia, Pennsylvania 19103, U.S.A.

According to Chambers (1990, p. 239), the types associated with some of Reeve's names, including *Melania curvicostata* and *M. densicostata*, 'could not be located' in the BMNH. I would like to know more about these specimens and the evidence for their validity as type material. Specimens in J.G. Anthony's personal collection, now deposited in the MCZ (Turner, 1946), have been recognized as figured specimens of nominal species described by Reeve (see Graf, 2001). Throughout their application the authors seem to have a genuine expectation that there should be a specimen that looks just like that figure. If Reeve's figure of *M. curvicostata* was based on a single (now missing) shell that may possibly be found (and the figure of that shell is adequate to recognize the species), would it not be more appropriate to simply designate the figured specimen as the lectotype under Article 74.4 of the Code?

Article 74.4 allows that the 'designation of an illustration or description of a syntype as a lectotype is to be treated as designation of the specimen illustrated or described; the fact that the specimen no longer exists or cannot be traced does not of itself invalidate the designation' (see Article 72.5.6).

Additional reference

Turner, R.D. 1946. John Gould Anthony, with a bibliography and catalogue of his species. *Occasional Papers on Mollusks, Museum of Comparative Zoology, Harvard University*, **1**(8): 81–108.

(5) Russell L. Minton

University of Louisiana at Monroe, Monroe, LA 71209, U.S.A.

The BMNH syntypes would become paralectotypes in need of re-identification if the authors believe that these specimens are in fact *Elimia paupercula* (Lea, 1862). No other action need be taken concerning *M. densicostata* (simple synonymy) or *G. paupercula*. The Commission may still want to place the names on the Official List.

(6) Dietrich Kadolsky

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1. *Melania curvicostata* Reeve, 1861 (currently *Elimia curvicostata*) is a junior primary homonym of *Melania curvicostata* Melleville, 1843 (p. 94, pl. 4, figs. 10–12) (currently *Melanatria curvicostata*). The latter name has been treated since its introduction as the valid name for a fossil from the Early Eocene (Sparnacien) of the Paris Basin, for which no other synonym is available (see Wenz, 1929, pp. 2620–2621). North American species have long been removed from the genus *Melania* Lamarck, 1799 (= *Thiara* Röding, 1798), which has historically served as a hold-all for many freshwater CERITHIOIDEA (now classified in the families THIARIDAE, PACHYCHILIDAE and PLEUROCERIDAE). It is probable that neither name has been classified in the genus *Melania* since 1899. However, this primary homonymy should be referred to the Commission under Article 23.9.5 of the Code.

2. The fact that *Melania curvicostata* Reeve, 1861 is invalid as a junior primary homonym removes a potential threat to the name *Goniobasis paupercula* Lea, 1862, which Thompson and Mihalcik want to protect.

3. I would prefer that the Code be strictly applied in this case. However, if a neotype is to be designated as proposed in the application, I wonder why an empty shell has been proposed considering the importance of anatomy and molecular genetics in molluscan taxonomy. Perhaps the applicants or others familiar with these taxa may wish to elaborate on this point.

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**Comment on the proposed conservation of prevailing usage of TERMOPSIDAE
Holmgren, 1911, *Termopsis* Heer, 1849 and *Miotermes* Rosen, 1913
(Insecta, Isoptera)**

(Case 3244; see BZN 60: 119–123)

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The genus *Termopsis* Heer, 1849 is compounded by the stem *term-* (of genus *Termes*, a Latin third declension masculine substantive) and ending *-opsis*, taken from the Greek word *ópsis*, meaning ‘aspect’ or ‘appearance’, which is feminine. According to Article 30.1.2 of the Code, the genus *Termopsis* is feminine in gender (this name is actually given as an example in the Code). All zoological genera ending in *-opsis*, irrespective of the original genus given by their authors, are feminine. Original specific names that are not in accordance with the current genus gender must be emended (see Article 34.2).

Article 68.1 explicitly states the precedence of the different kinds of type species fixation. Type species fixation by original designation has precedence over type species fixation by monotypy. Consequently, I request that para. 11 of Case 3244 be amended as follows:

- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Termopsis* Heer, 1849 (gender: feminine), type species by designation in (1) above *Termopsis breinii* Heer, 1849;
 - (b) *Miotermes* Rosen, 1913 (gender: masculine), type species by original designation *Termopsis procera* Heer, 1849 . . .

**Comment on the proposed precedence of *Bolboceras* Kirby, 1819 (July)
(Insecta, Coleoptera) over *Odonteus* Samouelle, 1819 (June)**

(Case 3097; see BZN 59: 246–248, 280–281)

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1. We oppose Jameson & Howden’s application to give *Bolboceras* Kirby, 1819 (July) precedence over *Odonteus* Samouelle, 1819 (June) because the latter name is not only the older synonym but is also more frequently used in the current literature than *Bolboceras*. We also oppose including names currently considered to be junior

synonyms on the Official Lists of Generic and Specific Names in Zoology. Since opinions differ about whether Kirby designated a type species for *Bolboceras*, we ask the Commission to designate as the type species of this genus the species that Kirby chose.

The usage problem

2. The main concern we have about Jameson & Howden's application is that they neglect the established and frequent use of *Odonteus* Samouelle in Europe in taxonomic, faunistic and conservation literature. Krikken (1978) rediscovered Samouelle's first introduction of this name into the literature and stated that the forgotten original spelling was *Odonteus*. Later, he considered *Bolboceras* Kirby, 1819 to be a junior synonym of *Odonteus* Samouelle, 1819 (Krikken, 1979, p. 37; 1984, p. 23). Nikolaev (1980), Shirt (1986) and Jessop (1986) had already accepted this synonymy before Krell (1990) presented further evidence for the temporal precedence of Samouelle's name. Before Krikken (1978), the spelling *Odonteus* had also been used occasionally (Hildt, 1892, p. 216, 1896, p. 215; Kinelski & Szujecki, 1959, p. 234). The claims of Jameson & Howden (BZN 59, p. 247) that Krell (1990) was the only one to use *Odonteus* Samouelle in recent times, and of Jameson (2002, p. 25) that this name 'has not been used in the primary literature for over 70 years', are not correct. Harpootlian in his comment (BZN 59, pp. 280–281) mentioned two more references, but even he underestimated enormously the extent of usage of this name. The name *Odonteus* Samouelle, 1819 (with or without mentioning the author) has been used as a valid name in its original spelling by Koch (1991, p. 350), Krell (1991; 1993, p. 23; 1994, p. 13; 1995, p. 52; 1996, p. 19; 2001, p. 247), Hyman & Parsons (1992, pp. 23, 33, 334), Krell & Fery (1992, p. 202), Silfverberg (1992, p. 37), Duff (1993, p. 126), Ball (1995), Carpaneto & Piattella (1995, p. 3), Gürlich et al. (1995, p. 71), Ádám (1996, p. 304), Alexandrovitch et al. (1996, p. 29), Hansen (1996, p. 125), Kahlen & Hellrigl (1996, p. 473), Kalisiak (1996, p. 1), Klausnitzer & Krell (1996, pp. 31f), López-Colón et al. (1996, p. 4), Nikritskii et al. (1996, p. 51), Rössner (1996, p. 49), Melloni & Landi (1997, p. 25), Telnov et al. (1997, p. 55), Carpaneto et al. (1998, p. 18; 2001, p. 313), Köhler & Klausnitzer (1998, p. 128), Nádai & Merkl (1999, p. 216), Martín-Piera & López-Coñón (2000, pp. 182, 498), Rheinheimer (2000, p. 102), Geiser (2001, p. 405), Jaszay (2001, p. 106), Lo Cascio (2001, p. 176), Ballerio (2002, p. 60), Frank & Konzelmann (2002, p. 129) and Schaefer (2002, p. 400). The correct spelling with erroneous authorship was used by Král (1993; *Odonteus* Dejean, 1821) and Ádám (1994, p. 12; *Odonteus* Leach, 1819). The incorrect subsequent spelling '*Odontaeus* Samouelle' was used by Paulian & Baraud (1982, p. 57), Zunino (1984, p. 18), Baraud (1992, p. 46) and Bunalski (1999, p. 8), and the spelling *Odontaeus* without author or with incorrect authorship by, e.g., Shirt (1987, p. 22), Schulze (1992, p. 182), Bordat (1997, p. 15), Mittal (1998, 2000), Mitter (2000, p. 63) (see next paragraph for older references).

3. *Odontaeus* Dejean, 1821 is in fact an incorrect subsequent spelling of *Odonteus* Samouelle, 1819 and not a separate genus group name because it was used at the same time for the same species. This cannot be explained by mere coincidence. After Samouelle's indication in 1819, *Odonteus* became the established name for *Scarabaeus mobilicornis* Fabricius, 1775 (then synonymized with *Scarabaeus armiger* Scopoli, 1772) and related species, although before Krikken's rediscovery of the

correct authorship and spelling, the name has often been attributed to other authors and the incorrect spelling *Odontaeus* has been used (Klug, 1845, p. 37; Horn, 1870, p. 50; Bertolini, 1891, p. 165; Reitter, 1893, p. 5; Boucomont, 1902, 1911; Arens, 1922; Wallis, 1928; Luigioni, 1929, p. 389; Endrődi, 1956, p. 29; Landin, 1957, p. 54; Janssens, 1960, p. 111; Machatschke, 1969, p. 274; Allenspach, 1970, p. 42 etc.). Before Cartwright (1953) rediscovered Curtis's (1829) type species designation for *Bolboceras* Kirby, the American species of this genus were in *Odontaeus* whereas *Bolboceras* had been used for more than 100 species of other genera (Horn, 1870, pp. 49–50; Boucomont, 1902, 1911; Wallis, 1928). Because of Curtis's (1829) type species designation for *Bolboceras*, Cartwright transferred the *Odontaeus* species to *Bolboceras* and the American *Bolboceras* species to *Bradycinetulus* Cockerell, *Bolbocerastes* Cartwright and *Bolborhombus* Cartwright. In the Old World, this shift of the name *Bolboceras* to what was formerly *Odontaeus* has only been followed by a few authors (Paulian, 1959, p. 44; Benasso, 1971, p. 133; Bangsholt et al., 1979, p. 31; Lundberg, 1986, p. 65; Nikolaev, 1987, p. 27; Barbero & Cavallo, 1999, p. 70), whereas from the 1980s the usage of the correct spelling and authorship of *Odontaeus* has become widely accepted and stable (see references above).

4. Hence, Jameson & Howden's application cannot be followed because Article 23.9.3 expressly states that the junior synonym can prevail only if 'the use of the older synonym would threaten stability or universality or cause confusion'. We have demonstrated above that in this case there is not any 'stability or universality' in the use of *Bolboceras*, while there has been relatively stable use of *Odontaeus*. The only 'stability' we can find in the use of *Bolboceras* is geographically restricted to the North American entomological community. This usage is relatively recent. In the older North American literature we can still find cases of use of *Odontaeus* (e.g. Wallis, 1928; Sim, 1930). In the European entomological and conservation community, it is *Odontaeus* that is stable since this name has been used predominantly for over a century and a half (hence there would be a lot of confusion in the European entomological and conservation community if the name *Bolboceras* were to be ruled as the name to follow). In the absence of 'stability or universality' in the use of the junior synonym (*Bolboceras*), Article 23.9.3 cannot be applied in this case, and the only sensible approach is to strictly follow the Principle of Priority and rule that the name to use is *Odontaeus*.

The type species problem

5. Contrary to Jameson & Howden (BZN 59, p. 247) the type species of *Odontaeus* Samouelle is *Scarabaeus mobilicornis* Fabricius, 1775 (p. 11), not *S. mobilicornis* Marsham, 1802 (according to Article 67.7). Although Samouelle wrote '*Scarabaeus mobilicornis*, Marsh.', Marsham is not the author of this species but simply used Fabricius's species name (Marsham, 1802, p. 8). Since *S. mobilicornis* Fabricius is an established junior synonym of *Scarabaeus armiger* Scopoli, 1772 (Boucomont, 1911, p. 15; Baraud, 1992, p. 46; Martín-Piera & López-Colón, 2000, p. 498), it should not be placed on the Official List of Specific Names in Zoology. Instead, its senior valid synonym (*Scarabaeus armiger* Scopoli, 1772) might be placed on the list.

6. We wonder whether Curtis's (1829) type species designation is valid. First Westwood (1855, p. 12) and then Boucomont (1911, p. 334) considered Kirby's remark in the original description 'My details of *Bolboceras* were taken from

B. quadridens' to be a type species designation (Westwood: 'The species, moreover, which it will be advisable to regard as the type of *Bolboceras*, will be *Sc. quadridens*, Linn., as that was the species dissected by Mr. Kirby.'; Boucomont: 'L'auteur de ce genre, Kirby, a pris comme espèce typique *B. quadridens* L. (F.)'. Kirby attributed *B. quadridens* erroneously to Linnaeus; this name was cited only in the last edition of *Systema Naturae*, edited by Gmelin (Gmelin, 1788, p. 1530) who referred explicitly to Fabricius's Indian species (Fabricius, 1781, p. 11), not to Panzer's (1793) *Scarabaeus quadridens*, which is a junior synonym of the European species *Bolbelasmus unicornis* (Schrank, 1789) (original spelling: *unicornu*) according to Klug (1845, p. 39).

7. Kirby's remark is certainly the reason why *Odonteus* and *Bolboceras* had been considered to be distinct genera for a long time (Klug, 1845, pp. 36–37; Horn, 1870, p. 50; Reitter, 1893, pp. 4–5). In our opinion, Kirby declared explicitly that he used exclusively *B. quadridens* to describe the genus. Therefore, the other species were included after the description was compiled. Hence, *B. quadridens* is neither only an example (sensu Article 67.5.1.) nor ambiguous under Article 67.5.3. It is, however, not explicitly designated as the type species either, but in fact it is the type species that Kirby chose. Jameson and Howden are right that the first unequivocal type species designation is that by Curtis (1829): *Scarabaeus mobilicornis*. Therefore, we ask the Commission to set aside Curtis's type species designation and to designate *Scarabaeus quadridens* as the type species of *Bolboceras* Kirby, 1819, following Kirby's intention and taking into account the current usage in Asia (see below). However, this act creates a new junior synonym: In 1979, Nikolajev described the monotypic genus *Indobolbus* for *Bolboceras quadridens*. According to *Zoological Record*, *Indobolbus* has only been used after its description by Krikken (1984) who included 10 other former *Bolboceras* species in this genus. However, in Asia both the type species of *Indobolbus*, *Bolboceras quadridens*, and *Indobolbus transversalis* are still assumed to belong to *Bolboceras* by Asian authors (Mittal, 1981; Yadav et al., 1990; Chandra, 1996). Moreover, *Bolboceras* is not only still in use for *Indobolbus* species, but used in the old broad sense of Boucomont (1902), which simply shows that the works of modern authors have not been considered in Asia so far (but also shows that the use of *Bolboceras* is not stable and universal). If the Commission decides to follow our proposal to designate *B. quadridens* as the type species of *Bolboceras* Kirby, 1819, *Indobolbus* Nikolajev, 1979, which has the same type species, will be a junior synonym. This would mean the shift of the name *Bolboceras* Kirby from a genus of ten American species to a genus of 11 species from the Afrotropical and Oriental regions (where the name is still in use). However, since *Bolboceras* is not the valid name for the American species anyway, this shift would not cause any more confusion than the necessary revived utilisation of the valid name *Odonteus* in North America, and only North America will be affected.

8. To fix the identity of *Bolboceras quadridens* Fabricius, 1781 beyond doubt, the first author of this comment (F.-T. Krell) herewith designates the lectotype. The species has been described from material of the Banks collection, which is housed in The Natural History Museum, London. Although, two further specimens of *B. quadridens* are in Fabricius's collection in Kiel (Zimsen, 1964, p. 24) they do not have to be considered because two specimens exist in the Banks collection. The first author chose the smaller specimen without label to be designated as the lectotype because it belongs to the species currently considered to be *B. quadridens* (as diagnosed by the

generic and specific characters given by Nikolajev (1979, p. 190) and Krikken (1984, pp. 27, 34) for *Indobolbus* Nikolajev, and Fabricius (1781, p. 11) and Chandra (1996) for *B. quadridens*). A second specimen with the handwritten label 'Scarab. quadridens / Fabr. Sp. Ins. no 37' belongs to *Bolboceras nigricans* Westwood, 1848, and does not correspond with the original description ('capitis clypeo bidentato'), because in *B. nigricans* the clypeus is pointed.

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Bolboceras* Kirby, 1819 and to designate *Scarabaeus quadridens* Fabricius, 1781 as type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Odonteus* Samouelle, 1819 (gender: masculine), type species by monotypy: *Scarabaeus mobilicornis* Fabricius, 1775;
 - (b) *Bolboceras* Kirby, 1819 (gender: masculine), type species by designation in (1) above *Scarabaeus quadridens* Fabricius, 1781;
- (3) to place on the Official List of Specific Names in Zoology the name *quadridens* Fabricius, 1781, as published in the binomen *Scarabaeus quadridens* and as defined by the lectotype designated in para. 8 above (specific name of the type species of *Bolboceras* Kirby, 1819).

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Comments on the proposed conservation of the specific name *Papilio eurymedon*

Lucas, 1852 (Insecta, Lepidoptera)

(Case 3222; see BZN **59**: 114–116; 204)

(1) Andrew Wakeham-Dawson (Executive Secretary)

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Even though this application involves a situation in which reversal of precedence does not require Commission action (see Article 23.9.2), the case was brought to the Commission for suppression of the senior name in response to Recommendation 23A of the Code. Before the Commission can vote on the issue of suppression, the authors must show evidence that the conditions of Article 23.9.1.2 have been met. The junior name, *Papilio eurymedon* Lucas, 1852, must have been used in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years.

This evidence was presented in the original application, but incorrectly edited from the published version. In addition to references published with the application, the evidence that the conditions of Article 23.9.1.2 are met in this case is as follows: Dos Passos (1964, p. 36), Emmel & Emmel (1973, p. 15), Lewis (1973, p. 12), Howe (1975, p. 400), Tyler (1975, p. 81), Orsak (1977, p. 66), Dornfield (1980, p. 42), Ferris & Brown (1980, p. 188), Miller & Brown (1981, p. 67), Hodges et al. (1983, p. 50), Beutelspacher (1984, p. 62), Collins & Morris (1985, p. 84), Emmel (1991, p. 69), Brown et al. (1992, p. 54), Emmel et al. (1992, p. 47), Feltwell (1992, p. 28), Miller (1992, p. 40), Feltwell (1993, p. 58), Stanford & Opler (1993, p. 109), Toliver et al. (1994, p. 121), Tyler et al. (1994, pl. 94), Bird et al. (1995, p. 107), Llorente et al. (1997, p. 52), Layberry et al. (1998, p. 89), plus numerous other scientific papers and popular field guides to western American butterflies of the past fifty years.

In the light of this evidence, the name *Papilio eurymedon* Lucas, 1852 is a nomen protectum under the conditions of Article 23.9.2 of the Code and the name *Papilio antinous* Donovan, 1805, which has never been used, is a nomen oblitum.

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This case presents an application to suppress the name *Papilio antinous* Donovan, 1805, in favour of the younger name, *Papilio eurymedon* Lucas, 1852. The authors make a well-presented case for reversal of precedence (Article 23.9), which does not have to be brought before the Commission since it meets the conditions of Articles 23.9.1.1 and 23.9.1.2 (see the comment above). However, in bringing a case for suppression to the Commission (as per Recommendation 23A) they unfortunately do not give any justification for such action of the name *antinous*. Without knowing why the name must be suppressed rather than just using reversal of precedence, I cannot support this application.

Comment on the proposed conservation of usage of the names *Phymaturus* Gravenhorst, 1837 and *Lacerta palluma* Molina, 1782 (currently *Phymaturus palluma*; Reptilia, Sauria) by designation of a neotype for *Lacerta palluma* (Case 3225; see BZN 60: 38–41, 58, 220)

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We do not support this application to the Commission. The proposed action attempts to confirm a mistake made by many authors since 1837, who have given to a liolaemine iguanid lizard the specific name that Molina (1782) clearly proposed for a teiid lizard.

We agree with the arguments in paras. 1 and 3–6 of the application, but we strongly reject those in the remaining paragraphs. In para. 2, the nomenclatural vicissitudes of *Lacerta palluma* Molina, 1782 have been summarized in shortened and unsatisfactory terms. Molina's taxon was not misidentified by Gravenhorst (1837) but by Daudin (1802) who introduced a spiny verticillate tail not mentioned by Molina; this character was later used by Gravenhorst when establishing *Phymaturus*.

As *Lacerta palluma* Molina, 1782 is a senior synonym of the teiid lizard *Callopistes maculatus* Gravenhorst, 1837, Veloso, Nuñez & Cei (2000) designated a neotype (accession number 2909, National Museum of Natural History, Santiago, Chile) in order to give taxonomic stability to the name *Callopistes palluma* (Molina, 1782), under Article 75(d) of the third edition of the Code (in force when we wrote the paper). In the light of Article 86.1.2 of the current (fourth edition) of the Code, we stress the fact that our 2000 paper was actually submitted for publication prior to 1 January 2000, even though it was published after this date. The other taxon, *Phymaturus flagellifer* (Bell, 1843), also referred to in Case 3225, was indirectly stabilized by the fixation of the above mentioned neotype.

We cannot agree with the suggested designation (para. 8) of the specimen BMNH-1946.829.84, the holotype of *Centrura flagellifer* Bell, 1843, as a neotype for *Lacerta palluma* Molina, 1782. This action seems to us to be based on a very subjective choice of how to achieve 'nomenclatural stability'.

The recent examples (since 1982) of the usage of *Phymaturus palluma* (Molina, 1782) reported in the application can be easily balanced with an equivalent number of citations of *Phymaturus flagellifer* and *Callopistes palluma*. The Commission holds a list of 17 examples, including Cei (1986), Veloso & Navarro (1988), Castro et al. (1991), Habit & Ortiz (1994), Inzunza et al. (1998), Morando et al. (2001) and Cei & Videla (2003).

We think that the request to conserve the existing usage of the generic name *Phymaturus* Gravenhorst, 1837 and the specific name *Lacerta palluma* Molina, 1782

is both unfit and unnecessary. In our opinion, no action is required by the Commission other than to reject the proposals made in this application.

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Comment on the proposed conservation of the specific name of *Vespertilio nanus* Peters, 1852 (currently *Pipistrellus nanus*; Mammalia, Chiroptera)
(Case 3240; see BZN **60**: 42–44)

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I work on African bats (e.g. Van Cakenberghe & De Vree, 1999) and am uncertain that the specific names of *Pipistrellus africanus* (Rüppell, 1842) and *Pipistrellus nanus* (Peters, 1852) are in fact synonyms. For this reason, I oppose the proposal to suppress the specific name of *P. africanus* and suggest that both names be conserved. Although I agree with Meredith Happold that *P. nanus* should be given precedence over *P. africanus* when the two names are considered to be synonyms. The name *P. nanus* has been more widely used than *P. africanus* (281 publications v. 24 during the period 1840–2003; the Commission Secretariat holds these references).

However, there is taxonomic evidence that these two names actually refer to two different taxa. For example, if the dimensions of the *P. africanus* lectotype are compared with those of *P. nanus* specimens from north-eastern Africa we see that *P. africanus* fits within the ranges for most of the dimensions. Nonetheless, it is marginally larger than the maximum values found for *P. nanus* for the length of the maxillary toothrow, the width across the upper molars, the length of the mandibula, and the length of the tibia.

A number of authors (e.g. Cotterill, 1996; Kearney & Taylor, 1997) point out that the systematics of this group of African bats are still not entirely clear, and they

indicate that a revision of the genus is required, especially as north-eastern Africa is a region with a large degree of endemism. To prevent the potentially valid name *P. africanus* being suppressed, I suggest an alternative proposal to the Commission.

The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *nanus* Peters, 1852, as published in the binomen *Vespertilio nanus*, precedence over the name *africanus* Rüppell, 1842, as published in the trinomen *Vespertilio pipistrellus africanus*, whenever the two names are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *nanus* Peters, 1852, as published in the binomen *Vespertilio nanus*, with the endorsement that it is to be given precedence over the name *africanus* Rüppell, 1842, as published in the trinomen *Vespertilio pipistrellus africanus*, whenever the two are considered to be synonyms;
 - (b) *africanus* Rüppell, 1842, as published in the trinomen *Vespertilio pipistrellus africanus*, with the endorsement that it is not to be given priority over the name *nanus* Peters, 1852, as published in the binomen *Vespertilio nanus*, whenever the two are considered to be synonyms.

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INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the *Bulletin*; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described . . .'. The Abstract will be prepared by the Commission's Secretariat.

References. These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in *BZN* **59**: 159–160.

Submission of Application. One copy should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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